



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Journal of the Society of Arts.

FRIDAY, JULY 6, 1855.

FOURTH ANNUAL CONFERENCE.

The Fourth Annual Conference between the Representatives of the Institutions in Union and the Council of the Society, was held on Monday, the 2nd instant, at the Society's House in the Adelphi. Viscount Ebrington, M.P., Chairman of Council, presided. The following members of Council were also present:—Rev. Dr. Booth, F.R.S., Mr. J. C. Macdonald, Mr. S. Redgrave, Mr. W. W. Saunders, F.R.S., and Mr. G. F. Wilson, F.R.S.

The following is a List of the Institutions represented at the Conference, and of the names of the respective Representatives:—

Andover, Hants and Wilts Educational Society.	Hon and Rev. Samuel Best.
Ashford, Mechanics' Institute	Mr. Henry Whitfeld.
Battersea, Branch of Belmont (Vauxhall) Mutual Improvement Society	Mr. J. G. Picking.
Battle, Mechanics' Institute	Mr. H. Martin.
Bedford, Literary and Scientific Institution	Mr. John Usher.
Bexley Heath, Society for the Promotion of Useful Knowledge	Mr. Flaxman Spurrell.
Birmingham, Polytechnic Institution	Mr. W. H. M. Blews.
Bolton, Mechanics' Institute	Mr. T. Barnes, M.P.
Boston, Athenæum	Mr. T. Garfit and Mr. J. W. Bontoft.
Bramley, (near Leeds) Mechanics' Institute	Mr. T. J. Pearsall.
Carlisle, Church of England Religious and General Literary Association	Mr. Alderman Cowen.
Chichester, Literary Society and Mechanics' Institution	Mr. H. W. Freeland.
Crieff, Mechanics' Institution	Mr. W. Stirling, M.P.
Croydon, Literary and Scientific Institution	Mr. Thomas Farley.
Devonport, Mechanics' Institute	Mr. U. H. King and Mr. J. C. Radford.
Dover, Museum and Philosophical Institution	Rev. William Yate.
Guildford, Institute	Mr. E. W. Martin.
Hastings, Mechanics' Institution	Mr. John Banks.
Horsham, Literary and Scientific Institution	Rev. J. F. Hodgson, M.A.
Leeds, Mechanics' Institution and Literary Society	Mr. W. H. J. Traice.
„ Yorkshire Union of Mechanics' Institutes	Mr. William Crowther and Mr. James Hole.
London, Olapham Literary and Scientific Institution	Mr. J. C. Buckmaster.
„ Crosby Hall Evening Classes for Young Men	Rev. Charles Mackenzie, A.M.
„ Jews' and General Literary and Scientific Institution	Mr. Morris S. Oppenheim.
„ London and South-Western Literary and Scientific Institution	Mr. F. J. Macaulay.
„ London Mechanics' Institution	Mr. S. Vallentine.

London, Pimlico Literary, Scientific, and Mechanics' Institution	Mr. J. M. Hucklebridge.
„ Walworth Literary and Scientific Institution	Mr. J. S. Noldwritt.
Lynn, Conversazione and Society of Arts	Mr. Henry Edwards.
Middlesborough, Mechanics' Institute	Mr. T. J. Pearsall.
Morpeth, Mechanical and Scientific Institution	Mr. Matthew Soulsby.
Newcastle-on-Tyne, Northern Union of Literary and Mechanics' Institutes	Mr. Robert Ingham, M.P.
Newport (Salop), Mechanics' Institute and Literary Society	Mr. H. Heane.
North Devon, Lending Library	Viscount Ebrington, M.P.
Portsmouth and Portsea, Literary and Philosophical Society	Rev. H. Hawkes.
Reigate, Mechanics' Institution	Mr. T. Martin.
Romford, Literary and Mechanics' Institution	Rev. W. Taylor Jones.
Royston, Mechanics' Institute	Mr. W. J. Simon.
Salisbury, Literary and Scientific Institution	Mr. Walter F. Tiffin.
Sevenoaks, Literary and Scientific Institution	Mr. George Franks.
Sheffield, People's College	Mr. T. J. Pearsall.
Shelton, Pottery Mechanics' Institution	Mr. J. L. Ricardo, M.P.
Shotley-bridge, Mechanics' Institution	Mr. T. G. Blakey and Mr. John Nicholson.
Stockton-on-Tees, Mechanics' Institute of Literature and Science	Mr. T. J. Pearsall.
Wandsworth, Literary and Scientific Institution	Mr. A. Coleman.
Ware, Institute	Rev. J. W. Blakesley.
Winchester, Mechanics' Institute	Mr. Henry Huggins.
Wrexham, Literary Institute	Mr. Willoughby Rainmond.

The Chairman called upon the Secretary to open the proceedings by reading his Annual Report to the Council.

Mr. Le Neve Foster then read the following Report:—

To the Council of the Society for the Encouragement of Arts, Manufactures, and Commerce.

GENTLEMEN,—In laying before the Council my report of their proceedings in connection with the Union of Institutes, the Educational Exhibition stands first in order of time, having been opened immediately after the holding of the last Conference. This Exhibition, it will be remembered, was held in performance of a pledge given by the Council at an early period of the Union. How that pledge has been redeemed, the representatives who attended in London last year had personal opportunity of judging. For the information of the Conference, I cannot do better than quote from the Council's report to the members of the Society:—

“It is unnecessary here to enter into all the details connected with its establishment and its objects; the members are familiar with them, from the chairman's address at the commencement of the Session, and from the reports in the Journal of the lectures and other proceedings

connected with it. The Council, however, would be wanting in their duty were they to pass over without observation that remarkable series of lectures which were delivered at St. Martin's Hall in connection with the Exhibition—a series remarkable not only for the number and varied character of the subjects embraced, but also for the attainments of the individuals by whom they were delivered. During the nine weeks that the Exhibition was open, there were no less than sixty-one lectures given. A list of these will be found in the Appendix to this Report.

"To these gentlemen the thanks of the Society are eminently due. It is to be regretted that no permanent and complete record of these lectures remains, but many were delivered without even written notes. Abstracts of nearly all were, however, published in the Journal; some few were published separately by their authors, and at the request of the Council, the MSS. of others were furnished to Messrs. Routledge, who undertook their publication in a cheap form, and the volume* of the Exhibition Lectures thus published forms an interesting and valuable contribution to our Educational literature.

"Reports on the different departments of the Exhibition were intended to have been made, but difficulties, of a nature unnecessary here to specify, prevented this portion of the plan being fully carried out, and only two were obtained, viz., one on the Fine Art Department, for which the Society are indebted to Sir C. L. Eastlake, P.R.A., and Mr. F. S. Cary, and the other, on the Musical Instrument Department, to the Rev. W. W. Cazalet. These were published in the Journal. In the Journal, too, will be found an original and interesting Paper 'On the School System of Norway,' contributed by Councillor Nissen; also an account of 'The New York Free Academy,' furnished by the Board of Education of that city, and Reports on the Exhibition from M. Milne Edwards, specially deputed by the Minister of Instruction in France to visit it, and by Dr. P. A. Siljeström, Commissioner for Sweden. The articles in the Journal, by 'A Member,' reviewing the books exhibited, must have been read with interest, displaying as they did an intimate and practical acquaintance with the subject. They may be taken as a careful, intelligent, and impartial report on that section of the Exhibition. It was early seen how desirable it was that such a collection should be permanent, and the Council lost no time in communicating with her Majesty's Government, urging the importance of forming a National Collection of this nature, and pointing out the facilities which the present opportunity afforded for commencing the work. The Council are happy to state that the Government has announced its determination to establish such a collection as a National Museum of Education, and the Council are anxiously looking for the accomplishment of this most desirable object. The Council have equal pleasure in announcing, that on the faith of such a Permanent Museum being established, a large number of the contributors to the display in St. Martin's Hall have most liberally responded to the request made by the Council, and have placed their contributions at the disposal of the Society as free gifts for the Permanent Museum. The Exhibition excited considerable interest, not only in this country, but among foreign nations. Very large and valuable contributions were received from abroad, and the Exhibition was visited by Commissioners from several Foreign governments and Educational bodies, specially charged with the duty of reporting upon its contents. Although in a pecuniary point of view the Exhibition did not pay its expenses, having, notwithstanding the liberal subscriptions received, involved the Society in a deficit of nearly £400, yet the Council are satisfied that it has not been held in vain, and that it has exerted a powerful and

important influence upon, and given a permanent impulse to, the progress of an improved education."

The Literary and Scientific Institutions bill, prepared by the Council, the provisions of which were discussed at the last Conference, has since passed into a law, and Mechanics' Institutes and Literary Societies hold now, for the first time, a recognized legal position. It is hoped that the effect of this law will be to give permanency to Institutions of this character, without which they could scarcely expect to become thoroughly efficient for the purposes for which they have been established. Already, in several instances, the provisions of the Act in relation to sites have been taken advantage of. The question of exemption from local rates is one which naturally follows. It has been discussed at former Conferences, and at the last was specially left in the hands of the Council, to deal with as might seem most desirable to settle the anomalies and difficulties with which the present Exemption Act abounds. I need not remind the Council how frequently this subject has been under their consideration. The result at which the Council have arrived, is, that any attempt, during the present session, to obtain inquiry into the subject would have been fruitless. The legislature has been occupied with other matters of deep and exciting import, which have rendered it hopeless to obtain that attention to the subject which would have enabled the Council to ensure its being satisfactorily dealt with. It must be borne in mind that the question is by no means simple; whenever it comes to be discussed the general principle of exemptions will be put upon its trial. An attempt to patch up the present system, it is believed, would meet with little favour from any party in Parliament. It is argued by many, admitting it to be the duty of a wise government to promote and assist such Institutions as these, that the system of exemption, which in effect causes the Institution rates to be paid by the occupiers of other property in the parish, is not that which should be adopted for the purpose, inasmuch as the provision can rarely be made effectual for the object intended; and in a very large number of instances the owner of the property, and not the Institution, receives the benefits. It is believed that the whole subject of rating generally is likely, at no very distant period, to come under the consideration of Parliament, and until then it is scarcely probable that an attempt to alter existing regulations would be attended to. The tendency of the Courts in their decisions on the present Act has been to narrow the privilege, and it may be fairly doubted if there be many Institutions in the kingdom, as the law is now interpreted, which are strictly entitled to the exemption. I may add, that it appears to be the opinion of members of Parliament and others, warm friends

* Lectures, in connection with the Educational Exhibition of the Society of Arts, Manufactures, and Commerce. London: G. Routledge and Co. Price 1s. 6d.

of the Institutions, that however unsatisfactory the present state of the law may be, any attempt at the present time, either to obtain inquiry or legislation on this subject, is not likely to result beneficially for the Institutions.

During the year, collections of Photographs, Chromo-lithographs, Nature-prints, and other objects of interest, have been lent to Institutions. It may not be amiss here to remark, that in order to meet the wants and wishes of the Institutions, no less than 300 specimens of Photographs, and 100 Nature-prints, have been collected by the Council. The cost to the Society of framing and repairing these and the lithographs, during the two years that they have been in circulation, has been not less than £170, in addition to the sums spent by the Institutions themselves for the same purpose. During the two years these articles have been lent to upwards of Eighty Institutions, forming, in many instances, the nucleus of general exhibitions, the value and importance of which need not at the present time be dwelt upon. It is gratifying to remark, from the reports which have been sent in, that these Exhibitions have, in many cases, been attended with considerable pecuniary gain to the Institutions.

At the last Conference, the Council brought forward for consideration, a plan for examining the students of classes in Institutes, and granting certificates of competency, which received its unanimous support, and the Council were requested to enlarge the plan, so as to embrace the inhabitants of rural districts as well as those of towns where Mechanics' Institutions are more generally found. This was done, the services of examiners obtained, and the scheme was issued to the Institutions, the month of March being fixed as the time for the first examination. So few individuals, however, were returned by the Institutions as candidates for examination, that the Council thought it better to defer undertaking the duty till the following year, when, from the correspondence which has taken place with the Institutions, there seems every prospect of an increased number of candidates. The time fixed for the first examination did not appear to afford sufficient interval for preparation, and the members of the Institutions were not in a position then to take advantage of the scheme. It may not be inappropriate here to remark, that Her Majesty's Government have given their sanction to the importance of examinations, by the establishment, in the last few weeks, of a system for examining candidates for situations in the Civil Service.

The efforts of the Council during the last two years, assisted by the Royal Commissioners of the Exhibition of 1851, to form a collection of raw and manufactured animal produce as the first step towards the establishment of a "General

Trade Museum," must not be passed over in silence. The Museum has not only its commercial value, but as an educational instrument the collection cannot fail to excite the deepest interest in the members of the Institutes. The collection is now temporarily established in the Society's Model Room.

It will be remembered that at the last Conference the Council called attention to the benefit likely to result from the artisans of this country visiting the Paris Exhibition during the present summer, and suggested the formation of local clubs for raising the necessary funds by means of weekly or monthly subscriptions, and called the attention of the Institutions to the assistance they might render to this object in their various localities. The Council undertook to collect and publish information as to railway and steamboat fares, passports, and lodging accommodation in Paris. In the Journal have already appeared the regulations under which passports may be obtained free of all cost to the artisan; and the particulars of arrangements for lodging, boarding in Paris, and for interpreter guides, &c. It was hoped that cheap trips could have been organized from London, but from the correspondence which has taken place with the French railway companies, it appears that they are not prepared to make any reduction in their ordinary fares, though the English companies expressed their willingness to do so. The ordinary fares from London to Paris, whether by steamboat or rail, at present remain the same as hitherto; but within the last few days facilities have been offered to parties from the northern districts, by means of special boats from Hull to Antwerp, the particulars of which will appear in the Journal.

The Council, in October, 1853, entered into arrangements with numerous publishers for the supply of books to the Institutions in Union at various rates of discount, and established a plan enabling the Institutions to take advantage of these discounts. After a trial of 19 months, it was considered the details could be simplified, and much delay got rid of, whilst a somewhat larger pecuniary benefit might be obtained for the Institutions. It was found by experience, that on the average, the actual discount obtained by the Institutions, after allowing for agency, barely exceeded 25 per cent. Accordingly, arrangements have been made for the supply of books at one uniform rate, of $27\frac{1}{2}$ per cent. discount on all books, and 25 per cent. discount on periodicals, except such as are irregular, when the regular trade discount will be allowed. The orders, instead of being collected monthly, will be supplied from day to day, and a single instead of a duplicate list of books is required. This plan has only commenced during the present month. The cost of the books purchased through the Society

during the year was £825 13s., and the saving to the Institutions has been £193 8s. 6d., or about 25½ per cent. discount on the published prices.

The Institutions will be glad to learn that the Society has during the past year succeeded in obtaining the production of good and cheap Microscopes. The importance of such instruments being brought within the means of the many, will be appreciated by the Institutions. On this head, I may again quote from the Council's report :—

"The important position which the Microscope now holds, not only in relation to pure but to applied science, and its great value in assisting to form those habits of observation which it is the object of all sound education to impart, induced the Council to believe that the promoting the production of a good instrument at a price which should render it more readily accessible to the many, was an object worthy of the Society; and, accordingly, under the advice and with the assistance of a Committee, composed of Mr. Busk, F.R.S.; Dr. Carpenter, F.R.S.; Mr. Jackson; Dr. Lankester, F.R.S.; Mr. Quekett; and Mr. W. W. Saunders, F.R.S., the following prizes were offered :—

"For a 'School' Microscope, to be sold to the public at a price not exceeding 10s. 6d.—*The Society's Medal*.

"For a Teacher's or Student's Microscope, to be sold to the public at a price not exceeding £3 3s.—*The Society's Medal*.

The Council undertook to purchase 100 of the smaller, and 50 of the larger instruments for which the medals should be awarded.

"The members will be glad to learn that for these prizes there have been numerous competitors. After a most careful examination of all the instruments by the Committee, they unanimously reported to the Council that the instruments sent in by Messrs. Field and Co., of Birmingham, fulfilled all the conditions required, and the Council, have, therefore, awarded to that firm the medals offered, on Messrs. Field and Co. entering into the necessary undertakings to comply with the requirements of the Prize List. The Council congratulate the members on this result. Those members who are desirous of securing any of these instruments, which will shortly be supplied to the Society by Messrs. Field, at a discount of 10 per cent., should at once send in their names to the Secretary."

At the meeting of the delegates of the Yorkshire Union of Mechanics Institutes, a resolution was passed requesting the Council of the Society, in its next prize list, to offer a prize for books adapted for classes in Mechanics' Institutes.

This suggestion will doubtless be acted upon if the Conference should approve it.

In accordance with the wishes expressed at the last Conference, a list of Lecturers, with their subjects, was prepared on the principle previously adopted, and the opinion of the next Conference should be taken how far it is desired that a similarly prepared list should be compiled and issued this year.

During the past year 36 Institutions have been taken into the Union, which now numbers 368.

Reports have been received from 110 Institutions only. From these it appears that the Institutions generally are in a sound condition and

increasing in usefulness. It is pleasing to observe that a very large number of them have classes for instruction, which are reported to be well attended. There are, however, very few to which schools are attached.

I have the honour to be, Gentlemen,

Your obedient servant,

P. LE NEVE FOSTER, *Secretary*.

The Secretary then read the following list of subjects which had been suggested for discussion :—

I. PARIS VISITS.

II. MUSEUMS.

III. LECTURES AND LECTURERS.

IV. CLASSES :—

1. Diagrams and Apparatus. 2. Class Books. 3. Examinations.

V. LIBRARY :—

1. Parliamentary Papers. 2. Catalogue of Books. 3. Books, Periodicals, &c., at reduced rates.

VI. LEGAL POSITION OF INSTITUTES :—

1. Trustees. 2. Borrowing Powers. 3. Rating.

VII. PUBLIC RECREATION GROUNDS.

The CHAIRMAN said, although the list of subjects this year was not quite so long as on the last occasion, when a more numerous meeting than the present one was presided over by his excellent friend Mr. Harry Chester, whose absence on this occasion, and from the periodical meetings of the Council, they had so much to deplore, and was only too well accounted for by the severe domestic afflictions he had sustained during the past year—he said, although the list of subjects to be discussed was not so long, yet it was sufficiently long and interesting, and would require so much time for discussion, that it would be necessary for them to adhere to the same rules for the conduct of the discussion as were established at previous meetings, viz., that no gentleman should address the meeting upon one subject for more than five minutes' duration, and that every gentleman on rising should announce his name and the title of the Institution which he represented, and that every resolution and amendment should be handed to the Chair in writing. It would be unpardonable in the Chairman if he set the first example of a breach of the rules which he had laid down; therefore, he thought, after the very full report which had been read by Mr. Foster, it only remained for him to address a very few words to the meeting. As he had been honoured by being again called to the legislature, after a voluntary exclusion from it of more than two years, he would begin with saying a word or two upon those matters now before parliament, in which they, as the representatives of Institutions throughout the country, naturally felt a more immediate interest. Foremost amongst these was the Public Libraries and Museums Bill, introduced by Mr. Ewart, which, he was happy to say, had reached its last stage, and stood for the third reading in the House of Commons that night, and if not then passed would doubtless do so very shortly, and would, he thought, be likely to work very satisfactorily, and produce excellent results in the country. He did not anticipate any serious danger to that bill now, either in the House of Commons or in the House of Lords. While speaking of Museums, he might mention that the motion for opening the British Museum to the public on Sunday was not carried, much to his own individual regret; but there was, no doubt, much to be said on both sides of the question. He could fully confirm the words of the report with regard to the difficulty of getting the question of the exemption of Institutions from rating settled. The whole question of rating, he knew, was intended to be brought before Par-

liament, and a comprehensive measure was being prepared by his hon. friend the President of the Poor Law Board, and would probably be introduced at an early period. He did not think Parliament would deal with the question piecemeal, and as regarded the Institutions themselves, he did not think they would have been benefited had the question been started, even if the attention of Parliament could have been secured for it in the present Session. To quit parliamentary topics—with regard to the Trade Museum, to which this Society attached so much importance, he was happy to say that, in consequence of a communication from the Royal Commissioners for the Exhibition of 1851, a deputation of the Council had very recently attended that Commission, and he had much pleasure in announcing that there was good reason to hope some arrangements might be made in the course of two or three months for exhibiting, as a permanent and continuous Exhibition, in connection probably with the Royal Commission, that Museum of which only a small portion could be displayed down stairs, for want of sufficient space. At any rate, the Society of Arts were most anxious, and no doubt all present were equally anxious, that so interesting and instructive an exhibition should not be put away, but that it should be continued as an accessible exhibition for the benefit of the public. The only other point to which he thought it necessary to call their attention, inasmuch as the question of the visit to the Paris Exhibition had been so fully explained in the report, that it was needless for him to say another word upon it, was the interest which the last Conference very justly manifested in the question of Examination of Students in the Classes of Institutions. They had heard in the report just read that very few candidates had this year offered themselves for examination. Should there be anything like the same backwardness next year, they would have just reason to be disappointed at the results of their labours and efforts; but they had reason to hope for better things from the promises and assurances they had received from many quarters, that students were preparing themselves for examination next year, and had only abstained from coming forward this year in order that they might make a more satisfactory exhibition of their industry and ability next year. He was sorry to say that amongst the different Institutions those in connection with the rural districts had not been the foremost, and, but for the consolation and hope he had received, he should have great cause for disappointment in that respect. He might, perhaps, mention with regard to the class in which he, as a country gentleman, felt the greatest interest—the sons and relations of farmers—a class above the labourer and below the gentleman farmer—he had made an effort in his own county to give them a little stimulus. He had proposed to give a prize to the farmer's son or relative, between 18 and 25 years of age, who exhibited the greatest proficiency in the geography and history of the British empire, in the English language, and in practical mathematics; and he had made it a condition—which, as he offered the prize, he thought he had a perfect right to do—that they should each obtain from the ministers of their respective denominations a certificate of their general proficiency in scriptural knowledge. He had offered a prize of £20 for three successive years, and if that failed in eliciting some efforts on the part of farmers' sons in his own native county of Devonshire, he confessed he should be much disappointed. Looking down at the watch, he found he was setting a bad example, therefore, without detaining them further, he would call upon them to discuss the first question before them—the exceptional question—for they could not hope for it every year, viz., the Visit to the Universal Exhibition at Paris.

At the request of Mr. E. W. MARTIN (Guildford Institute), the Secretary again read the list of subjects for discussion, as given above.

PARIS VISITS.

The CHAIRMAN would be glad to hear from any gentleman present whether any organisation had been commenced, or was intended, in the various localities which they represented for visiting the Paris Exhibition.

Mr. T. J. PEARSALL (Stockton-on-Tees Mechanics' Institute of Literature and Science) said, the Committee of the Institution which he represented had, amongst other matters, communicated their ideas to the Secretary upon the subject now under discussion. From all that he had heard on the subject, they appeared to be quite unaware of the amount of accommodation which the railway and steam-boat companies were willing to afford to excursionists. It had been suggested that parties connected with the great ports of the northern and eastern coasts might send out excursion trips, but he found, from the *Leeds Mercury*, that boats were now plying from Harwich and Hull to Antwerp, and that first-class passengers could go from Leeds or Normanton to Antwerp, out and home, for 30s., and from Hull to Antwerp and back for 15s. That gave every opportunity for good accommodation, and third-class fare from Antwerp to Paris was about 16s. From all that he had heard upon the subject, it appeared to him well that the Society of Arts had not gone too far in promulgating plans for the visits of parties to Paris, and he believed the general feeling was, that it was advisable to defer the visit for the present, as the Exhibition in several departments was yet far from completed. The mechanical department, which would possess great interest to them, he had understood was by no means finished.

The CHAIRMAN said the subject had been under the anxious consideration of the Society's Committee. They had had many communications with railway authorities, but up to the present time they had not met with the response on the other side of the channel which they had hoped for, and which they still did not quite despair of. He agreed with Mr. Pearsall as to their good fortune in having deferred the visit, for he (the Chairman) had heard exactly the same thing, that up to the present time it would have been too soon to see the Exhibition in anything like its perfection. He might promise the gentlemen present, that any information which might be gathered, would be from time to time communicated in the Journal of the Society, for the benefit of the Institutions in the country, and enable them to regulate their future plans.

The Rev. WILLIAM YATE (Dover Museum and Philosophical Institution) was sorry to inform the meeting that, after several communications with officials of railway companies, he had not been able to obtain any reduction of fares in favour of excursionists *via* Dover to Paris, either by railway or by steam-boat. He had been anxious to escort a party of apprentices to the Paris Exhibition in the same way as he had done to the Great Exhibition in 1851. In the latter instance, he brought up 52 apprentices from Dover for a week, and the cost of their travelling to and fro, provisions, paying for admission to the Exhibition, and to other places which they were anxious to see, amounted to only 24s. 6d. each, whereas, he found they could not get to Paris and back alone for less than that sum; therefore he had been obliged to give it up, as the apprentices could not spare the sum that would be required for their visit.

The CHAIRMAN suggested, that if the Committee were furnished with the fact that large numbers would be prepared to go from various parts of the country, it might arm them with arguments to use with the reluctant railway companies, but that must of course be the subject of local inquiry.

Mr. W. STIRLING, M.P., (Creech Mechanics' Institution) inquired whether any official information had been received as to the Paris Exhibition being a permanent one, or whether next year it would be closed, and its contents dispersed.

The SECRETARY said no information had been received from which it was to be inferred that the Exhibition

would be permanent. A portion of the building was no doubt intended to be permanent.

Mr. REDGRAVE remarked, that it was understood the Exhibition would be quinquennial. The building would be permanent, no doubt, for many uses. It was of stone, and was not likely to be pulled down.

The SECRETARY said there were extra portions of the building which were temporary for the present purposes.

The CHAIRMAN said he was informed by Mr. Macdonald that it was intended to close the Exhibition in October, the Imperial decree being to that effect.

MUSEUMS.

The CHAIRMAN then proposed that they should proceed to the next question, viz., the establishment of Economic or Trade Museums. There had, he said, been several communications on the subject, and it was felt by the Council, who attached considerable importance to it, that any strong expression of feeling on the part of this Conference, representing Institutions in so many different parts of the country, would be sure to be attended with very considerable weight. He would state that the Museum below stairs was open to all members of Institutions present. They might see what it was in its present imperfect state, and they might infer from that what the exhibition might be made from the addition of materials, some of which were already at the disposal of the Society, if a larger space were available for it.

Mr. REDGRAVE thought it very important that the Conference should come to some resolution expressive of the desirableness of maintaining this Museum as a Public collection and Permanent Exhibition. There were already under the auspices of the government, interesting collections at Kew and at Jermyn-street, the former of botanical, and the latter of geological subjects, and this would form the animal portion. The Society of Arts had made this collection at the instance of the Royal Commissioners, and the object now was to make it of a permanent character and accessible to the public, and he thought if gentlemen present, representing so many varied interests, would pass some resolution upon the subject, it would strengthen the hands of the Council in going to the Royal Commissioners and pressing this question upon them. He would, therefore, take the liberty of suggesting the adoption of some such resolution as the following:—

“That this meeting is greatly impressed with the advantages, both commercial and educational, which would arise from the permanent establishment and arrangement for exhibition of the interesting collection made by the agency of this Society as one portion—the animal portion—of a General Trade Museum.”

The resolution was then proposed by Mr. W. STIRLING, M.P.

Mr. TRACE (Leeds Mechanics' Institution) suggested that they would be in a better position to discuss this subject if a brief statement were given them of the essential provisions of the existing Museum and Libraries' Act, and also of the Act which had been that day mentioned by the noble chairman, and which might be considered as virtually passed, or, at any rate, they might hope soon to see it law. All persons connected with these Institutions must have seen the inconvenience of discussing questions of this kind upon abstract grounds, without a chance of bringing it to a practical account. If through the medium of these Acts they could see a practical way of establishing museums in various localities, they might be prepared to discuss the subject.

The CHAIRMAN said, this would rather seem to come under the head of Libraries and Museums, with respect to which there was a Bill introduced intituled “A Bill for further promoting the establishment of Free Public Libraries and Museums in municipal towns, and towns under the Local Improvements Act, and to Parishes.” What they were now discussing was a general national collection of the animal portion of the Trade Museum, the mineral portion being collected in Jermyn-street, and

that representing the vegetable kingdom being at Kew, so that it would hardly be relevant just now to read that which applied only to the establishment of Museums in different parts of the country. If they first disposed of the General Trade Museum for the country at large, they might then pass on very properly to the other question.

Mr. TRACE had very great pleasure in seconding the resolution, and he thought it commended itself to every one connected with trade, or with the applications of raw produce to manufacturing purposes. Some two months ago, when in London, he was shown, in the offices of this Society, by Mr. Pearsall, the specimens then in course of collection, with which he was not only interested, but from which he acquired practical information useful to him in trade, and one of the privileges of their attendance at this Conference would be that of seeing those matters somewhat better arranged, and upon a more extended scale. The greatest amount of ignorance prevailed in the present day with regard to raw materials in daily use—the places they came from—whether vegetable, animal, or mineral—the mode in which they come to us—the processes they have gone through—the sophistications they have suffered; these were all matters on which many were in utter darkness, and it was only through the medium of such a collection as this that they could gain the information they desired.

Mr. BUCKMASTER (Clapham) said there was already a Museum of Economic Geology in Jermyn-street, and he hoped there would also be a General Trade Museum. A union of the three collections was required.

Mr. PEARSALL (Stockton-on-Tees Mechanics' Institute of Literature and Science) should like to see at once carried out, anything they could accomplish, even if it were an instalment only. They would then avoid the evil of delay. A question had arisen as to the propriety of having separate museums, but men might go to their graves if they waited until they could carry out the whole object at once. He hoped the members of the Institutes would not wait till these various museums were brought to some such place as the British Museum. If good was to be done to a certain extent at once, let them accept the opportunity.

The CHAIRMAN expressed his great satisfaction and delight at what had fallen from the previous speakers. No time should be lost in getting what they could. He looked forward to the completion of the Trade Museum—to bringing the collections from the animal and vegetable kingdoms especially, within some convenient building. It was obvious that flax, cotton, wool, and silk should be taken in connexion with each other.

The resolution suggested by Mr. REDGRAVE, and proposed and seconded by Mr. STIRLING, M.P., and Mr. TRACE, was then carried unanimously.

FREE PUBLIC LIBRARIES AND MUSEUMS.

The CHAIRMAN said he would now state the provisions of this Bill, which was before the Houses of Parliament, and would shortly, he trusted, become the law. It first repeals the last Public Libraries Act, but continued valid all operations commenced under that Act. It then confers on boroughs with a population of upwards of 5,000, the power, by a majority of two-thirds, at a public meeting of the burgesses, to adopt this Act, the expenses of the same to be paid out of the borough fund. Districts having an Improvement Board might similarly adopt the Act; and in parishes of more than 5,000, they might, by a requisition of ten ratepayers, have a public meeting; if two-thirds of the ratepayers adopted it, it was carried into effect by a Commission to be appointed by the vestry of not less than three nor more than nine, who might sue and be sued;—such Commission was to be elected from time to time, and to go out of office in rotation, the expenses to be paid out of the poor rates. The vestries of two or more parishes, having an aggregate population of the same numbers, might adopt the measure, so as to have a joint public library or museum, or

both, and they might appoint a body of Commissioners, who should determine the amount of rate to be levied in any one year, such rate not to exceed one penny in the pound. Some more details followed, and he trusted that this explanation would give the Conference an idea of what the main provisions of the Act were. The Bill had gone through Committee, so that it would be rather late to effect any alteration in its provisions—but not too late.

Mr. HENRY EDWARDS (Lynn Conversazione and Society of Arts) thought the proposed majority of two-thirds was too large. Could not that majority be altered; or was it hopeless to do so?

The CHAIRMAN did not know that it was hopeless. He must say he quite agreed in opinion with the last speaker.

Mr. H. W. FREELAND (Chichester Literary Society and Mechanics' Institution) begged to ask the noble Chairman whether the document from which he had read was an Act, or only a Bill before Parliament?

The CHAIRMAN said this was a Bill which had been introduced by Mr. Ewart, to give facilities in reference to the object in question. The Bill had passed through the Committee, and had been reported in the House of Commons, and it stood on the paper for a third reading. It was not too late to attempt to make the alteration if it should be the opinion of the Conference that such alteration should be made.

Mr. HENRY EDWARDS said, that being the case, he should move that "a majority" be inserted in the Bill, instead of a majority of two-thirds.

Mr. H. W. FREELAND said he should have very great pleasure in seconding that motion.

Mr. REDGRAVE suggested that it would perhaps be better to communicate the opinion of the Conference to Mr. Ewart, who had charge of the Bill; because it was quite possible that this very provision might have been a matter of compromise entered into to enable him to carry his Bill.

The CHAIRMAN observed that this was only to be considered as the expression of the opinion of this meeting. The same principle ran throughout the Bill. He knew that his hon. friend Mr. Ewart had taken great pains with the Bill, and perhaps the expression of opinion on the part of the meeting might be accompanied with thanks to him for the trouble he had taken. Such a communication was at all times an encouragement to gentlemen when they found their efforts were appreciated by those whose opinions they naturally attached great weight to. He would therefore suggest to Messrs. Edwards and Freeland a resolution in the following terms:—

"That this Conference highly appreciates the services of William Ewart, Esq., M.P., in promoting legislation on behalf of Public Libraries and Museums, and for bringing in the Bill now before Parliament, of which the Conference generally approves; and this Conference desires to express its opinion that the principle of a simple majority ought to be adopted in the Bill, instead of a majority of two-thirds."

Mr. EDWARDS and Mr. FREELAND having expressed their willingness to move and second the above resolution,

Mr. T. GARFIT (Boston Athenæum) said he was inclined to think that this measure would be more likely to be received with favour in the country if its provisions were less stringent. He was inclined to think that in the present state of the country there was a strong feeling against any new rates being levied, and consequently that if they tried to carry out the principles of this Bill with a bare majority, such an attempt would be attended with considerable difficulties. If the vestry carried their object with a bare majority, they would have afterwards to encounter many very unpleasant things. He thought the Bill would be better in its present shape than with the alteration or amendment proposed.

The CHAIRMAN.—As there was a difference of opinion, he thought the resolution might with advantage be broken into two parts,—the one consisting of that portion of which the Conference generally approved, namely the

conveyance of thanks to Mr. Ewart; and the other having reference to the question of the majority being simply a majority or a majority of two-thirds.

This suggestion was agreed to, and the first part of the resolution, as proposed by the Chairman, was carried unanimously.

The CHAIRMAN said the members of the Conference could now state their views as to the "majority."

Mr. JAMES HOLE (Yorkshire Union of Mechanics' Institutes) said he entirely coincided with what had been said by one of the previous speakers. He thought there would be a great difficulty in carrying a proposition of this sort among local bodies, who would hardly ever be found willing to tax themselves for any object, and least of all for the purposes of education. There were exceptions to this proposition, as in the great town of Manchester, but that he could account for; they had a free library, which was established without opposition, and there were many special circumstances attaching to that case; but generally it would be found that people in towns and elsewhere were averse to any rate being levied for the purposes of education.

Mr. TRAICE concurred in opinion with the gentleman who spoke from Boston (Mr. Garfit). He thought it would be well to get rid of the proposed regulation of a majority of two-thirds if they could do it with propriety, but he did not think they could do so, and his reason for saying so was this,—all experience went to prove that any measure which was in advance of the people in any locality, instead of meeting with any co-operation was met with hostility. Every obstacle, every quibble was taken advantage of, and he thought the provision, though stringent, would be more likely to ensure the measure being carried out efficiently.

Mr. W. M. H. BLEWS (Birmingham Polytechnic Institution) thought a bare majority was sufficient to decide such cases.

The Rev. J. W. BLAKESLEY (Ware Institute) said, as it appeared to him there was a considerable difference of opinion as to the quantum of majority, but there was no difference of opinion as to the promotion of education throughout the country; all they wished to do, he presumed, was to strengthen the hands of Mr. Ewart. It must be remembered that they would have to deal with men who were accustomed, as men of business, to carry on their functions by simple majorities, as in the case of vestrymen. With that simple majority they might win a pitched battle, but they might also encounter many hindrances in carrying a plan to its practical termination. The difficulty would always be great unless they carried public opinion with them.

Mr. HOLE did not see why a simple majority should not carry this as well as other matters.

Mr. EDWARDS thought this question of the majority might be left to Mr. Ewart's discretion.

Mr. FREELAND said his only object was to elicit the opinion of the Conference, and to strengthen Mr. Ewart's hands.

Mr. STIRLING, M.P., said the resolution *did not* state that it should be left in Mr. Ewart's hands, but it boldly stated the opinion of the meeting that a bare majority should be substituted for two-thirds. Might it not be better to say that the meeting would prefer a majority, leaving the matter in Mr. Ewart's hands?

Mr. GARFIT said that as he had given rise to this discussion, he begged to express his anxiety to support Mr. Ewart. He knew that the Act of 1850 had not been carried out to any great extent. If this Bill were to come into operation with the principle of a bare majority, it would be in opposition to that of many newly-constituted boards—such as burial boards, where when a different rate was proposed, the question was decided by a majority of two-thirds.

The CHAIRMAN then put the second part of the resolution, which was moved by Mr. H. EDWARDS (Lynn); and seconded by Mr. H. W. FREELAND (Chichester):—

"That the Conference desires to express its opinion that the principle of a simple majority ought to be adopted in the Bill, instead of a majority of two-thirds."

To this an amendment was proposed:—

"That the Bill do stand as at present."

On a division being taken, the original resolution was lost,—the numbers being—

For the amendment.....	21
Against it	19
Majority	2

in favour of the clause as it stands.

LECTURES AND LECTURERS.

The CHAIRMAN—The next topic for consideration was that of Lectures and Lecturers. Gentlemen were all aware of what had been done as regarded the Lecture List. Did the Institutions wish to have the List of Lecturers printed as last year? It was an expense into which the Society would not enter without being assured that the List was useful, and was appreciated by the different Institutions.

Mr. TRACE asked whether the Secretary could tell what was the cost to the Society of publishing this Lecture List?

The SECRETARY said the expense was about £70 or £80 each year. Last year the cost was upwards of £80, including postage and all expenses.

Mr. TRACE said that so far as his own experience went this List was of considerable value; but it was well worth while to consider whether this was the best mode of expending the £80. He confessed he was surprised at finding the amount was so large; at the same time, while he was on his legs, assuming the List to be published, there were one or two points on which he required information. In some cases lecturers were delighted to come themselves to an Institution to lecture; one lecture would be well attended—another would not be so. It was difficult to make out a selected list—to prepare a list of the lecturers to be given. It was desirable to have the names and addresses of lecturers who had lectured four or five times at various Institutions, and then by some confidential correspondence they could find out what were the characteristic qualifications of the lecturer. In any future list let this be attended to. They had on the List at present the names of professors at Colleges, whilst others were known only at one or two respectable but obscure Institutions, where there might be only 50 or 100 members. He wished simply to know who the lecturers were, and thought that Institutions should be requested to send a list of lecturers who had lectured during the past session. He thought that instead of making the List annual it should in future be published only once in three or four years.

The CHAIRMAN thought that a list from 400 Institutions of the persons who had given lectures would fill a large volume. It was for the Conference to decide the point.

Mr. A. COLEMAN, (Wandsworth Literary and Scientific Institution,) said with respect to the lecture list furnished to the Institution which he had the honour to represent last year, it had proved of the greatest value; but he thought the List might be reduced to one-half by giving the general character of the subjects lectured upon, without indicating the title of single lectures; a sufficient amount of information might be given to the Institutions from adopting this course. He thought it would involve the Council in great difficulty if they were to receive the lists, and from the lists they were to choose out certain lecturers. A great many persons gave lectures gratuitously who would not like to be regarded as lecturers except to the particular Institution.

The CHAIRMAN thought it right to say, on behalf of the Council, that, receiving as they did largely from the various Institutes, they would be ashamed of grudging them a part of their own money for anything that was

valuable. The Council only wished to elicit whether the List was found to be useful, and whether the Institutions thought it worth the money expended.

Mr. PEARSALL felt, and he was sure all the representatives must feel diffidence in speaking of other Institutions, with which they were not connected, and expressing opinions as to the value of the list. He would suggest that the opinions of the Institutions on this point be collected by means of a circular or otherwise, by the Secretary of the Society. A truer guide to the wishes and feelings of the Institutes would thus be obtained.

Mr. HOLZ said, he found that in Yorkshire generally they had very few paid lecturers; most of the lectures given were gratuitous. Now, as regarded the List, he would submit that the matter might be supplied at a less cost in a condensed shape. The matter on two pages might be put into one page, and thus a large amount of the cost which went in postage at present would be saved.

Dr. BOOTH said, perhaps the last speaker would suggest more fully how these lists could be condensed.

The SECRETARY said there was a difficulty in condensing this matter, as it was necessary to give the required information in a tabular form, and, therefore, they must have a large quantity of white paper left; whereas, if it were crammed, the whole matter would appear like a confused mass. But this subject had not been uncared for by the Council.

The CHAIRMAN said these were matters of pure detail. The main question was, whether the Institutions wished the lecture list continued on the same general principle, and whether the Council were to understand that the Conference suggested inquiry of the different Institutions as to the utility and value of the lecture list; and even this, perhaps, might now stand over for another year.

Mr. EDWARDS suggested that the Institutions making returns of lecturers and lectures, should not return the names of those lecturers who did not go beyond their own districts, as in the case of the Rev. Mr. Trench, Sir Robert Peel, and others.

Mr. TRACE thought that a little careful editing would supersede a great deal of the difficulty which had been suggested. He thought the lecture list could be more compressed by giving the name in one type, the substance of the lecture in another, and the name of the Institution at which the lecture was given at the bottom.

Dr. BOOTH proposed that Mr. Trace should place himself in communication with the Secretary.

The CHAIRMAN took it as understood for this year, that the lecture list should be made out in such a way as the Council deemed expedient, and then great benefit would arise from these suggestions being made. He thought the names of all lecturers need not be published. The cases of lectures given in the village school-rooms, and of lectures to large audiences in towns, were quite different. This subject being disposed of, they would now proceed to the fourth question, of Classes;—the first part being Diagrams and Educational Apparatus.

Mr. E. W. MARTIN (Guildford Institute) begged to request that a little more time should be given to the Institutions for making their returns for the lecture list, there not being sufficient time between the receipt of the letter requiring them and the answer.

Mr. CAMERON (Midland Union) would be glad to know what utility there was in these lectures? Of what good had lectures been to Institutions generally? For his own part, he had never met with a thoroughly cultivated man who had received any benefit from lectures.

DIAGRAMS AND APPARATUS.

The CHAIRMAN recurred to the fact that they had now come to "Classes," the first section of which was Diagrams and Apparatus, next Class books, and lastly the more important point of Examinations.

Mr. EDWARDS said it would be a great benefit if a series of diagrams, &c., could be furnished by the Society and lent out to different Institutions.

The Hon. and Rev. SAMUEL BEST (Hants and Wilts Educational Society) said diagrams had been collected by the Associated Societies in his own part of the country; models had been purchased from France which were of some value. He could not agree with the remarks which had been made by Mr. Cameron on the subject of lectures. He knew that as to the value of one casual lecture, no great information might be carried away; but there was a general spirit of inquiry excited by the delivery of these lectures, and he had seen the practical benefit of them. They disseminated the desire for further information, and promoted the establishment of reading rooms throughout the agricultural districts. Lectures stirred up the spirit of inquiry, and that which led a man to improve his mental condition must be good in itself. He most heartily wished to see lectures established in these Institutions.

Mr. CAMERON stated that during the last three or four weeks he had called upon several members of Parliament, and that their opinion was that the Mechanics' Institutions had failed, and that the lecture system was utterly useless.

The CHAIRMAN believed that both with regard to the use of Lending Libraries and to the formation of Classes, the cause of success in most cases might be traced to the interest excited by lectures.

Mr. TRAICE said he should like to know, out of the 658 members of the House of Commons, how many had attended lectures at Institutions, and just in that ratio should he value the opinions they expressed. He contended that as yet our elementary system of education was so imperfect, especially all voluntary elementary education, and so utterly inefficient in connection with the elements of scientific truths, that the only way in which young men got a glimpse at such information was through the medium of popular lectures. He spoke from his own personal experience, having, when a young man, been a member of the London Mechanics' Institution.

The Rev. H. HAWKES (Portsmouth and Portsea Literary and Philosophical Society) begged leave to say that in the Society which he had the happiness to represent, the greatest possible good effects had been produced from the improved supply of diagrams. They were rendered peculiarly valuable when lectures were being given. So far from agreeing in what had been said as to lectures, whilst he admitted that no great amount of information was obtained from a mere desultory lecture, he was equally assured that a systematic course of lectures was far from being undesirable. Now, when his Society required him to attend on this occasion, he asked his friends what they particularly wished him to bear in mind on their behalf; they mentioned emphatically the great want, at a moderate charge, of lecturers, not *ad captandum* lecturers, but such as were suited to the class rooms, and for cultivated minds. In the Mechanics' Institutions, and elsewhere, there was a want of good diagrams to bring to the eye distinctly the subjects treated of.

Mr. INGHAM, M.P., stated, that the Northern Union of Mechanics' Institutes, which held its meetings in different parts of the district, did all in its power to encourage the collection of apparatus. Living as he did on the sea coast, they had great opportunities of obtaining valuable collections of apparatus at reasonable prices, of which they endeavoured to avail themselves. He thought that a great deal might be done by endeavouring to prevail upon lecturers to leave their apparatus behind them, when Professor Airey last year lectured at Newcastle, he with great readiness did so, as also did Professor Chevallier, who came over from Durham to lecture on the law of tides. There was another mode, too, of extending a knowledge of common things amongst the people. There were a number of Working Men's Institutes which they preferred attending, because they could do so without the necessity of changing their clothes, and the Literary and Mechanics' Institutions in connection with the Northern Union allowed members of those institutes to attend their lectures at the same cost as their own members.

Mr. BUCKMASTER thought it most important that any collection of apparatus should be of so simple a nature, that any person employing it should be readily acquainted with it. It was of no possible use to put into a man's hands apparatus which he did not understand; and he certainly would not like to undertake to make a collection of paintings, because he did not understand painting. He knew that many diagrams were perfectly useless to the teacher. He agreed with Mr. Traice that the education ought to be begun with the boy. Indeed, they were now attempting to do with the working men that which ought to be done at school. It was useless to give them apparatus unless it was so simple as to be easily comprehended, and he thought every instructor of science ought to be enabled to construct his own apparatus. He recollected being sent to a school in Staffordshire, established by the Earl of Harrowby, and being furnished with a lot of German apparatus and German books. Now, he did not understand German, and though the apparatus was very pretty and appeared very ingenious, it was of no use to him. The Department of Science, at Marlborough House, had made a collection of apparatus which was very valuable. What they really wanted was a collection of simple apparatus and diagrams, with books to explain them. It was very little use for this Society to get together a collection of apparatus without they had the means of drawing the attention of the conductors of Mechanics' and Literary Institutions to it. The proper course was to begin with the education of the boys, and through them influence the men, for no large amount of science could be learnt in Mechanics' Institutions. The foundation must be laid in the school, and if the boy did not learn they must make him, and then when he grew up he would have such a knowledge as might induce him to improve himself.

Mr. COLEMAN believed there were a great many very valuable collections of diagrams, but very few people knew where they were to be seen. He thought the Society of Arts might do great good by letting them know where the various educational diagrams and apparatus might be obtained. He believed that by the introduction of their boxes of colours, drawing instruments, and now by their microscopes, the Society of Arts had done great good, and he trusted they would extend their operations to the production of other useful apparatus. If proper apparatus were put into his hands, the mechanic would be enabled—they would all be enabled—to test the quality of goods they were buying. The microscope would tell them to a great extent whether any given article was pure, and the working man would never object to pay a good price for a commodity if he was sure that it was good. They were also in want of cheap chemical apparatus. He knew many persons who made considerable progress in chemical researches, but were stopped in consequence of the want of apparatus, which was very costly. He believed that the Council of the Society of Arts would do great good if they were to offer a prize for cheap apparatus suitable for lecturers.

Mr. TRAICE thought they were all agreed as to the great advantage of being possessed of diagrams and apparatus, as they would often enable gentlemen to lecture who could not otherwise do so. Franklin said, that no man had any pretension to be considered a philosopher, who could not bore a hole with a handsaw, or saw a plank with a gimlet. He believed that there were many men in the country who would be enabled to offer instruction to others if they had the aid of proper apparatus. He would therefore suggest that Faraday's "Chemical Manipulation" should be reprinted, improved and brought down to the present time, at a price which would render it generally accessible. He believed that the publication of that work would be more useful than any other measure they could propose on the subject. He believed that a great deal of good would be done by Societies if they would occasionally employ young men in connection with them to exercise their ingenuity by the construction of apparatus. That was the way that Dr. Birkbeck first

gave an interest to young men in his original institution. If greater attention was also given to the teaching of drawing in these Institutions, it would be highly beneficial, for if every educated man knew how to lay down a geometrical line, and a little perspective, he would only want a board and a piece of chalk, to enable him to illustrate his lecture by diagrams.

Mr. SOULSBY, (Morpeth,) said, that Mr. Buckmaster had referred to giving corporal punishment in schools, and disparaged the value of Mechanics' Institutes. Now they must recollect that in these Institutes they had to deal with men whose elementary education had been neglected; and with regard to corporal punishment, they should recollect that there was a passage in Ecclesiasticus, to the effect that they should beat the ribs of their son with a stick. He did not know whether there were any fathers of families present, but he hoped if so, they would not think it necessary to carry out that injunction.

The CHAIRMAN trusted that Mr. Soulsby would confine himself to the question before them, as corporal punishment might lead them into a very wide, and he thought, irrelevant argument.

Mr. BUCKMASTER begged to observe, that the only remark he had made was this, that if a boy would not learn they must make him.

The Rev. Mr. BLAKESLEY was exceedingly glad to observe the efforts that were being made to improve the value of these Institutions. He thought it would be most useful to endeavour to improve educational apparatus, and more especially that a globe should be prepared, showing the phenomena of nature in various districts. He believed that there was no branch of education so badly supplied with the necessary apparatus as geography. The map and globe makers used such bad paper in their construction, that it was impossible to do any thing with them. Mr. Hughes had lately published some maps, of which he highly approved, and he therefore used them in the instruction of his own children. What they wanted most was a globe of reasonable size, showing, if possible, the general features of physical geography, for the use of Mechanics' Institutes. He had himself attempted something of the kind by obtaining one of the globes of the Society for the Diffusion of Christian Knowledge, painting the whole of the land white and the sea black, and also making marks to denote volcanoes and other physical features of the earth. He believed that there was no subject which merited greater attention than physical geography, and there was none upon which so little information could be obtained. The present system was very like that of the legend of the two knights, in which the manufacture of the shield was so uncertain, that one maintained it to be gold, whilst the other contended it was silver. He despaired of any great progress being made in scientific education whilst the Institutions were so defective in appropriate apparatus. As to the opinion of M.P.'s, alluded to by Mr. Cameron, it would appear that they knew nothing on the subject, that they went knocking their heads against the wall first on one side and then on the other, and believed they were walking in the centre of the road. Any person who knew anything of these Institutions knew that they had proved most beneficial, and what they were now called upon to do was to assist them a step higher in the amount of benefit they could afford the public, and he believed that, no matter what might be said to the contrary, that what were called *dilettante* lecturers, did great good by directing the attention of the public to the most useful objects.

The Rev. Mr. BEST said, they had heard a great deal about diagrams, and they were aware that some very excellent diagrams had been published by the Working Men's Educational Union. There were also many diagrams of a high class published by the Department of Science and Art at Marlborough House, as well as by Messrs. Griffin, Carpenter, and Westley, &c. He felt that if Institutions could not obtain these diagrams for themselves, they might unite in counties or districts to

purchase them. They did so at Winchester, where they had a number of small Rural Societies connected by an Association. He did not think that this subject was so much one for the Society of Arts to deal with as for Local Unions, such as the one of which he had the honour to be a member. It appeared to him hard indeed if the Societies in different districts could not unite together to obtain diagrams for the use of their districts, by which means the whole of the Societies might have the use of them. He begged to move, as one step in the right direction—

"That this Conference begs to impress on the Council its anxious desire that the Educational Exhibition, now in the hands of the Government, should be exhibited to the public without further delay, in accordance with the pledge given to the Council by Her Majesty's Government."

Mr. BUCKMASTER seconded the motion, and said, that a few years ago he went into the country to teach a class of 60 arithmetic, and 23 of the number he had to put back to the ordinary rules of simple arithmetic.

This motion was passed unanimously.

Mr. EDWARDS thought there was something unsatisfactory in the various propositions, and he thought that there could be no better means for collecting diagrams and apparatus for the different Institutions than the Society of Arts, if they would undertake it, and he would therefore move the following resolution:—

"That the Council of the Society of Arts be requested to obtain a series of diagrams, illustrative of lecture subjects, to be lent to the Institutions in Union."

The Rev. Mr. BEST believed that there would be this difficulty, that societies in Cornwall or Cumberland would not be able to obtain the diagrams excepting at great expense. He believed that such collections would be much better made through local unions.

Mr. EDWARDS still thought the Society of Arts best adapted for the purpose, if the collection could be made without involving any great expense. It must be recollected that the Society of Arts had undertaken the business of the Societies in Union on the express understanding that they were neither to gain nor lose by them. It therefore became a matter for consideration what charge would be involved in the arrangement.

The Rev. Dr. BOOTH observed that the question of profit and loss had never been a matter of consideration with the Council.

The Rev. Mr. BEST did not think there would be any difficulty with regard to the financial means for obtaining the diagrams and models, without which many Institutions were comparatively useless.

Mr. SIMON, of Royston, seconded the motion.

Mr. HOLE stated that it would certainly be a good thing if any arrangements could be entered into for the Society of Arts becoming agents on behalf of small local unions. If the Society of Arts would undertake to do so, he believed there would be no difficulty in getting meetings in the various districts to form such unions.

The CHAIRMAN suggested that the Unions already existing might serve as the types of others.

Mr. INGHAM, M.P., again referred to the Northern Union as a proof of what might be done by a number of such societies in obtaining lecturers, apparatus, &c.

Mr. BUCKMASTER said that with regard to the Society of Arts, it could only act for Societies in Union. If Mr. Best had been enabled to get diagrams from the Department of Science at Marlborough-house, he had been more fortunate than, he believed, were many others,—great difficulties being generally thrown in their way. If the Society of Arts would make the collection, it would be most beneficial, and he saw no reason why they should not do so. Their box of colours and drawing instruments had done a great deal of good, and he believed also that a collection of industrial diagrams would be most serviceable, if they could be cheaply circulated.

Mr. SIMON (Royston) might observe that the Society with which he was connected was so situated that it could not well come into union with others. Besides, there was

no body which could be readily got at, in which they would have so much confidence as the Society of Arts.

Mr. PEARSALL believed that to circulate apparatus from one place to another would be most expensive, in consequence of the want of connection between the different modes of conveyance. Again, it must involve the expense of somebody to travel about with it, and look after it, for he might observe that a good microscope, for instance, could not be entrusted into the hands of inexperienced parties. Indeed he would not trust his microscope in the hands of his own brother without he felt well convinced he knew how to manage it. It was not so much that diagrams were wanted, as a knowledge of where they were to be obtained. Mr. Griffin and others had published good educational apparatus, and a correct balance might be obtained at a cost of only 10s. or 11s.

Mr. TRACE thought they were going too far, and that they had not sufficient information on the subject. He thought if the Society of Arts could obtain the necessary data as to where apparatus might be obtained, and circulate it, that was all that would be required. He would move, as an amendment on the the motion of Mr. Edwards:—

“That the Council of the Society of Arts be requested to published in the Journal, from time to time, lists of diagrams, apparatus, &c., with the names of the publishers, and any necessary supplementary information; and, further, that the meeting most heartily commends the means taken by the Society to procure, at a cheaper rate, the instruments of most essential use in illustrating scientific instruction.”

The Society had done great good by obtaining them a cheap box of colours and drawing instruments, and now the microscope; and if they could carry the same principle further, and provide them with a cheap balance, and perhaps a simple air-pump, still further good might be done.

Mr. COLEMAN seconded the amendment, believing that not only the expense of obtaining the collection required, but of carriage from place to place, would be too great, as compared with the benefit to be derived. If they were to publish a list from time to time in the *Journal of the Society of Arts*, stating where cheap educational apparatus was to be obtained, that was all that would be required.

Dr. BOOTH observed, that if they obtained the Permanent Educational Museum, which her Majesty's Government had undertaken to establish, that would in a great measure carry out what was wanted.

Mr. FREELAND agreed with the proposition of Mr. Traice, believing that the expense of obtaining a complete collection of educational models would be too great. He held in his hand a circular of the Hants and Wilts Educational Society, showing what had been done in the locality—and if the Society of Arts would send a similar circular amongst the Societies in Union showing where educational apparatus was to be obtained, it was all that could be required.

Mr. NOLDWRIGHT (Waltham) thought that at all events the discussion had done some good—as would also the publication of such a list as that now proposed. He confessed that when he entered the room he did not know that such a balance as that alluded to could be obtained at Messrs. Griffin's. He thought that if they laid before the public a list of places where educational apparatus, suitable for lectures and classes, could be obtained, that was all that would be required. If, however, that failed of meeting a now acknowledged want, they could hereafter adopt other means to supply it.

Mr. PEARSALL also supported the amendment, on the same grounds as those urged by previous speakers.

Mr. EDWARDS still pressed his motion, as though they might be strong enough in the North and in the metropolis, to form Local Unions, they were not in that part of the country to which he belonged—and he felt that there no body could be found which would enjoy so much confidence as the Society of Arts.

The question was then put, and the amendment was carried.

LOCAL SUB-UNIONS.

Mr. HOLE moved—

“That, considering the success of the Yorkshire and other Unions, the Council of the Society of Arts be requested to consider the possibility of organising local Sub-Unions, in places where no local Union exists.”

He thought such Sub-Unions most important, and believed that in many instances the Society of Arts might be enabled to form such Sub-Unions, though they could not be carried out by the localities themselves. Such Sub-Unions would be of great use, and materially assist the general Union with the Society of Arts.

Mr. COLEMAN seconded the motion. He had tried to establish a Union between the Societies within 20 miles round London. He invited deputies to meet him from all the Societies, but only those from two or three Societies met, and even then his Society was forced to give up the idea, as those parties did not attend subsequent meetings. He would support this resolution, under the belief that the Society of Arts might be enabled to carry out these Unions, though his own Society had failed.

The CHAIRMAN would observe, that he had attended, at Salisbury, one of the periodical meetings of the Hants and Wilts Union, of which the Rev. Mr. Best was so active and useful a member, and had been much interested with the proceedings. He was a great advocate of local Unions, believing that they must materially tend to the benefit of the general Union in connection with the Society of Arts.

Mr. TRACE submitted, that the words, “by correspondence or personal communication,” should be added to the resolution.

The resolution was carried as originally proposed.

CLASS BOOKS.

The CHAIRMAN said the next question was that of class books, on which the Committee of Council had received some suggestions—books suited for evening classes of Mechanics' Institutions. It was suggested that the Society should offer a prize for such books. The books of that character already published were intended for children, but it had been considered that class books for teaching the elements of education to adults should be written upon a different principle, and in different language from that which would be adapted to teach children the same thing.

Mr. HOLE said, the proposition having come from the Yorkshire Union, he would state that it was owing to the general want of knowledge of the books published for this purpose—where they could get them cheapest and best. It was thought that the Society of Arts had peculiar facilities on both these points.

Mr. CAMERON called attention to the class books published by the Irish School Society.

Mr. TRACE remarked, that supposing the Society of Arts decided to offer a prize for the production of works in connection with this subject, it occurred to him that the premium of the Society's Medal would not be a sufficient incentive for the production of a series of class books such as was required. The reward would not be sufficient to elicit a manual on each subject. He begged to suggest that the Society should offer a prize for the best manual on educational expedients, or rather for a critical essay upon educational works. Such an essay, he thought, would be very valuable, but as to offering a prize for the production of a series of works, he thought it was out of the question.

Mr. BUCKMASTER would make the same remark with regard to class books as he had done with regard to educational apparatus. If the Society of Arts could get a collection of books suitable for Mechanics' Institutions they would not be bound to take them, but they could

recommend them. So many of those books were published that it was difficult to make a selection from them. Another thing was, that through the medium of the Society of Arts, Mechanics' Institutes ought to be supplied with those books on the same terms as they were supplied to schools. As it was at present, Mechanics' Institutes could not get the Irish Society's School books on the same terms as they were supplied to schools.

Dr. BOOTH said it was not easy to come to a decision on this subject, inasmuch as commercial interests were involved in it. The Council, however, would consider the question in all its breadth. He thought the Council would hardly like to pledge themselves to recommend any particular list of class books, as it would be sure to engender a great deal of commercial hostility.

Mr. TRAICE—Then we are to understand that the Council will take the subject into their consideration.

EXAMINATIONS.

The CHAIRMAN then introduced the next subject, that of Examinations, upon which, he said, they had heard a great deal last year.

The Hon. and Rev. SAMUEL BEST said, having given a notice to the Secretary on this subject, he trusted the meeting would bear with him for a few minutes. It appeared to him that the question of examinations during the past year had been treated rather mildly in the report, but they must look at it in its practical bearings. In his opinion, they would never get people to come up for examination without some practical result as an inducement. If they intended these examinations to be carried out they must attach a money value to them; and until the Declaration which was annexed to the original proposition was carried out in all its fulness, they would never get people to come forward to undergo a voluntary examination. The gist of the matter rested in this—if that declaration were signed by the great firms and by the railway companies, or by Government, it would at once attach a money value to a successful examination, and under such circumstances, he had no hesitation in saying, they would get plenty of people to come forward to be examined. The question resolved itself into this—if they could get this declaration carried out, they would, in his opinion, succeed in their object, but not otherwise. It appeared to him that there could be no opportunity more favourable than the present for putting forward that declaration in the proper quarters, and if influential parties in different localities could be induced to sign that declaration, so that it could be sent in to the Council here, they would, by that means, promote the object they had in view. He conceived it to be impossible for the Council of the Society of Arts in London, to be able, through the length and breadth of the land, to consult all the great commercial bodies on this subject. But if a resolution were passed by the Conference, and backed by the example of the Society of Arts, applying to the great commercial firms and companies in London, he thought it would give effect to the recommendation. He, therefore, begged to propose

"That the Institutes, under the direction and with the aid of the Society, be requested to procure influential signatures to the declaration."

Dr. BOOTH begged to second the resolution. He knew that their noble Chairman took great pains in endeavouring to obtain signatures to the declaration, but he was sorry to say without effect. Whether or not they would be more successful in this, now that the times were somewhat changed, it was not for him to say; at all events, he thought it was worth the trial.

Mr. BUCKMASTER said, last year he prophesied that there would not be a dozen candidates for examination, although other members of the Conference were more sanguine upon the matter. Previous to the last Conference a letter from him was published in the Journal, in which he expressed his opinion that they would never get any large number of persons to be examined, unless they held out a further inducement than the mere diploma of the Society

of Arts. He thought it was a most important subject; and that it was more difficult to deal with than some imagined. He was glad to hear from his lordship that he had offered a prize of £20. He (Mr. Buckmaster) might be induced to try for such a prize, but he would not try for nothing. At the same time, examinations were good things in themselves, as they were proof of something done. Every man must do something to get through an examination, and if he failed, he had added to his store of knowledge, which, perhaps, he would not have done had it not been for a desire to pass the examination. With regard to the signature of large firms to the declaration, unless they were willing to give men more money in the event of their passing the examination, or doing something for the advantage of the men, he did not think it would succeed.

In reply to an inquiry from Mr. Coleman, the SECRETARY stated that the machinery for examination remained the same as last year.

The Hon. and Rev. SAMUEL BEST remarked that education, in his opinion, ought to be as general as possible, as the best preparation for a special education. In support of that, he would refer them to the evidence given by Mr. Escher before the Poor Law Board, which was the most important evidence on that subject he had ever seen, and he should be glad if the Society could publish it, and disseminate it through the country, because it would impress them with the value of education in general principles, to be afterwards specially applied. He thought that should be made the basis of the examinations, and that we ought not to deal too much with specialities.

Mr. CAMERON—What do you mean by a general education?

Mr. BEST—That a person should be able to write a good letter; that he should have a thorough knowledge of geography, grammar, history, arithmetic, and other matters that might be pointed out. The special education, which he thought they had a little too much trusted to, should come after that general education.

Mr. TRAICE said the real difficulty of the case was this,—and it was no use to conceal it—if they gave prizes, it would be to give to the grown man rewards commensurate only with the attainments of boys of 12 years old. The ignorance which they found amongst young men entering classes was frequently such that they had to deal with them as they would with a child of 10 or 12 years old—a child whose education had been neglected. It was useless to expect to stimulate such persons by rewards of such a nature. At the same time, he did not think it was a thing to be lost sight of, and he thought in some Institutions it might be brought into operation. But what might be carried out to advantage was—it was done at Huddersfield—that a record should be taken of the level of attainment which each pupil had reached when he entered the class; that such a record should be made from time to time, and thus a sort of stock book would be kept of the advancement of each individual pupil. He thought this might be done as a preliminary step. But he scarcely hoped to see the application of prizes to young men who, however ignorant they might be, were still sensible of their humiliating position, inasmuch as after 12 months work in their class they were only upon a level with their children or younger brothers and sisters in the national school.

Dr. BOOTH here read the terms of the declaration as follows:—

"We the undersigned, having in view the very interesting and instructive character of the Educational Exhibition now opened at St. Martin's Hall, in Long Acre, by the Society for the Encouragement of Arts, Manufactures and Commerce, commend the same to the attention of all persons professionally or otherwise concerned in Education; whether general or special, whether of young persons or of adults, whether of the rich or of the poor.

"The Exhibition illustrates the actual condition of education, not only in the United Kingdom and in some of the Colonies,

but also in France, Belgium, Holland, Norway, Sweden, Denmark, Germany, Switzerland, Spain and the United States, and is highly suggestive of improvements in the modes and means of public and private instruction.

"We are desirous that all persons engaged in education, and especially the teachers of normal and elementary schools, should be enabled to profit by the advantages which this Educational Exhibition is calculated to confer upon those who carefully study it; and we invite the civil authorities, ministers of religion, patrons and managers of schools, and all persons of authority and influence, to promote the making of arrangements which may enable scholars, tutors, governesses, schoolmistresses and others engaged in education, to resort to London, and to visit the Educational Exhibition before the 31st of August next, when it must necessarily close."

Mr. HOLE thought such a document, signed by railway companies and banking firms, and extensively circulated throughout the Institutions, would give a great stimulus to classes in Mechanics' Institutes; but he did not anticipate any very great results until something more was done in the classes themselves. In many cases the instruction was limited to the library—most of the books being novels—or to the reading-room, with a large proportion of penny literature and penny talent—then there were the musical entertainments, and the miscellaneous lectures, which, however valuable in themselves, would not give the attainments necessary to pass an examination in that general education which was advocated by Mr. Best. If the Society could give adequate assistance to the classes—if they could get that assistance which the School of Practical Science pretended to afford; if, instead of the miscellaneous lectures, they could secure, at an economical charge, the delivery of a course of 15 or 20 lectures—then, he believed, these examinations would be realities, and not till then.

Mr. COLEMAN trusted the Council would not be discouraged by the remarks just made. An arrangement of this kind could not be developed in a year. He felt convinced that if the subject were more frequently brought before the notice of the various Institutions, they would see the advantage of these examinations, and time would show a monetary advantage to those persons who had obtained a diploma from the Society of Arts. In endeavouring to establish classes, he had been met with the remark, "What is the good to us when we have obtained the information which you propose to teach? What benefit is it to us to have a knowledge of chemistry, or geology, or mathematics?" But if the individuals had the diploma of the Society of Arts, to show to the world that they were proficient in the subjects they had studied, he believed it would be a stimulus to the classes of Mechanics' Institutes. The Institution with which he was connected, was about to establish excellent classes during the next winter, and they had almost all been established in the hope, on the part of the members of the classes, of obtaining certificates of merit from the Society of Arts; and he had no hesitation in saying, that if that idea were to be abandoned, those classes would not be carried out. In the neighbourhood with which he was connected, they had advantages over many others, in having a school in which instruction in the sciences was generally given; and, he thought, if members of Institutions in other localities exerted themselves to establish such schools throughout the country, a far more healthy feeling would be exhibited in the Institutions themselves. He believed the examinations proposed by the Society of Arts would ultimately succeed; but they could not expect the thing to be carried out in a day, or a month, or a year. He believed the examinations would ultimately become of monetary value, as it must be an advantage to a workman, in the price he obtains for his labour, if he enters the workshop with the certificate of the Society of Arts, that he is qualified above many around him for the duties and engagements which he undertakes. It was by that means examinations would become valuable. He believed many persons would be willing to study with the object merely of obtaining a diploma of that kind.

Dr. BOOTH said this was a subject in which he had taken a great interest, and he would, therefore, say a few words upon it. He was the person who proposed the declaration, which, he might say, had completely fallen to the ground. The noble chairman made great efforts at the time to obtain the signatures of railway companies, and other public bodies, to that declaration, but, in almost every instance, he believed they declined, or at any rate they did not respond to it in the way that was hoped, and in that way the matter might be said to have fallen through. Although they had not been able to succeed with that system of examination at present, there was no reason why other bodies, possessing greater advantages, and coming before the public with higher authority, should not carry out to a successful issue what we had inaugurated; and he was glad to see that the government had made some small beginnings in this way. He might mention that at Woolwich the exigencies of the war made a greater demand upon the schools there than they could readily supply, and the authorities were obliged to draw upon the schools of the country for fresh pupils. What was the result? The young men so selected were found, as he had been informed, very much in advance of those who had received their entire instruction there. It was not that the men were better, as a class, than those found at Woolwich, but a selection was made in the former case, which was not done in the latter. He thought they might bid the measure God speed; and if it met with the approval of the meeting he would move the following resolution:—

"That this Conference views with great approbation the inauguration by the Government and the East India Company of a system of public examinations, whether absolute or competitive, preliminary to public employment, as a step in the right direction, on the ground as well of its stimulating the general education of the country as of its tendency to provide a well-instructed and intelligent class from which vacancies in public offices may be supplied."

He saw no reason why the public schools of the country should not send up young men to compete for the Government appointments, and as a point within their own reach, he saw no reason why Mechanics' Institutes should not claim from the Government the privilege of sending up one or two of their best men to compete for the rewards. That would be doing what they as a Society could not effect, and that would attach a money value to those honours, which would strike the hearts of those who received their education in connection with Mechanics' Institutes.

The Hon. and Rev. SAMUEL BEST said he preferred the resolution of Dr. Booth to his own.

The CHAIRMAN thought one was not at all incompatible with the other, and he would put both to the meeting.

Mr. BUCKMASTER mentioned, with regard to the Department of Science in Jermyn-street, that upon an advertisement appearing in the *Times* that a course of six lectures were to be delivered by Professor Willis, in two hours after the advertisement appeared there were 600 applications for tickets from working men, the charge for the course of lectures being 6d. or 1d. per lecture.

The CHAIRMAN remarked, that the question of the education of the middle classes, and the more enlightened of the labouring classes, had brought him into the Society of Arts. He was anxious to see what could be done through the medium of this Society towards filling up a great want in this country, and he was in hopes that last year something might have been done in that direction, and he took the trouble to write to several influential persons of his acquaintance, but they did not respond to it in the manner he had expected, and, therefore, the declaration had remained a dead letter up to the present time. He went far in agreeing with the opinions expressed, that something in the shape of reward or honours were necessary to induce people to study for an examination. In the prize he had offered, gentlemen well qualified for the task had consented to act as his examiners, and in offering

that prize, he felt that there was some credit in gaining it, and that it was one not altogether unworthy of striving for. He felt that some such inducement was necessary to stimulate the parties to come up for examination. It would be desirable that this Conference should renew its expression of their wish that the declaration should be signed, and be sent round for that purpose, not only by this Society, but by those who were the chief promoters of education in their respective neighbourhoods. He thought that they might do something in getting signatures to this declaration; he trusted many influential signatures might be thus obtained.

MR. BEST's resolution was then put and carried unanimously.

THE CHAIRMAN said that Dr. Booth would then move his resolution, which he understood would be seconded by Mr. Traice. He begged to say a few words upon it, as it had reference to the subject of public examinations. This was a question in which he took a great interest, and it would be in the recollection of some of the gentlemen present, that he had written on the subject of examination of persons candidates for official situations. Though he did not think that the competitive system always elicited the best candidate—for no human system was perfect—yet, when they compared the chances of success under the competitive and under the present systems, he thought no reasonable man could entertain a doubt on the subject. At any rate, whatever objection there might be to examining a man—because he who passed the best examination was not always the best man—yet they knew that he must have taken pains to work hard, and to deny himself many pleasures; and if there were no other good in that system, it at least stimulated a man to take pains with himself. He did not over-value book learning; yet when they knew how situations and promotions were distributed, he looked upon this as an immense advance upon what hitherto had degraded our constituencies. He might add that for one instance of aristocratic jobbing, he knew hundreds of electioneering jobbing of the worst kind. The former were sure to be noticed, the latter generally escaped observation.

THE REV. DR. BOOTH, F.R.S., then proposed, and Mr. J. W. TRAICE seconded, the resolution, which was carried unanimously.

PARLIAMENTARY PAPERS.

THE CHAIRMAN said the next question for discussion was that of the Distribution of Parliamentary Papers and Blue Books to Literary and Mechanics' Institutions. He might mention that more than once he had thought of moving in the matter since his return to Parliament, but, on reflection, he thought it desirable to wait for the opinion of the Conference before he mentioned it in Parliament, in order that he might have an opportunity of learning what were the wishes of the Institutions on the subject.

MR. BUCKMASTER had assumed that the question had last year been settled as to the selection of parliamentary papers, and that that was all that could be done.

MR. HOLE took it for granted that the resolution of last year would still be in operation.

THE CHAIRMAN said the Conference did not then come to a clear conclusion in the matter. If they wished the Council to indicate to them what sort of papers they could be supplied with when the Council thought they were likely to be interesting in different localities, the Council might consider the best means of carrying out the wishes of the Conference.

MR. HOLE begged to suggest as a resolution, that the Council be requested to prepare lists of Parliamentary papers, &c., for the benefit of the Institutions in union, and that the Council use its power in carrying out this object.

THE REV. MR. JONES (Romford) said this appeared last year to be a question of difficulty. A Committee of the House of Commons, he had heard, had come to a conclu-

sion as to the distribution of these masses of papers. Mr. W. J. Fox, M.P., thought it would be useful to make selections, or a catalogue of such papers as might be useful. He apprehended a catalogue might be sent round, and then let the Institutions make their own choice.

THE CHAIRMAN here remarked that the papers of a session weighed about a ton.

MR. W. H. FREELAND begged to say that the Institution he was connected with had a list made out by their Committee of useful papers and books.

THE CHAIRMAN said the papers which were most likely to be useful were those which Members of Parliament liked for their own library, and he thought that if Institutions looked to Members of Parliament alone for these, they would not always get what they required. His impression was that they could not come to a definite resolution on the matter. Suppose Parliament were inclined to grant what was asked, the Council might perhaps suggest those papers which would be most useful in particular localities; some might be very valuable in manufacturing districts, and useless in mining, or agricultural, or shipping districts. He thought if the Conference desired some steps to be taken in the matter, it should be left to the discretion of the Council, and it was not impossible that the Council might be made useful. If this was the understanding, they would now pass on to the next point for consideration.

MR. TRAICE said, the Society would render an important service by making it their business to publish, at the end of the year, a compendium, which would be a basis on which to proceed. He thought, however, it would be more prudent to leave the matter in the hands of the Council. He hoped the time would come when the Government would deem it their business to establish some board which would give, not as *Punch* termed it, the quintessence of Parliament, but the essential matter, which had been so long concealed within ponderous books.

THE SECRETARY begged to remark that two years ago a very eminent publishing firm proposed to undertake that duty with a well qualified staff, and to publish this matter at a reasonable rate, once a month or quarterly. A prospectus was sent to every member of both Houses of Parliament, but not one single answer was ever received, and the whole thing fell to the ground. The firm, he begged to state, was a first-rate and highly respectable one.

It was agreed that the subject should be left in the hands of the Council.

CATALOGUE OF BOOKS.

THE CHAIRMAN said the next matter for discussion was as to making a catalogue of books fitted for the Libraries of Institutes.

THE SECRETARY stated that it had been suggested that the Council should make and publish a catalogue of such books as were likely to be useful in the Libraries of Institutions.

MR. EDWARDS could speak to the value of such a catalogue in forming a library, which was generally a mere *hap-hazard* affair to accomplish.

MR. HOLE begged to remark that the Yorkshire Union of the Mechanics' Institutes had requested Mr. Traice to prepare a practical manual for Mechanics' Institutions, which was now nearly completed, and several sheets of the work had gone through the press. A large number of books fitted for Mechanics' Institutes were named in it, and from his connexion with various Mechanics' Institutions, and from his general experience, he had selected an excellent catalogue. What he would suggest, and which he had stated to Mr. Foster, was, that Mr. Traice should forward the sheets of his manual as they appeared, and submit the proofs to this Society, and that it should bear the *imprimatur* of the Society, and thus let the work go out as a catalogue for the use of Mechanics' Institutions.

DR. BOOTH believed that the Council would be very glad to avail themselves of such an offer. He was quite sure that no person they could employ for the purpose

would do it more zealously than Mr. Traice; indeed, the Council would rather father his work.

Mr. TRAICE said, that as no attempt had been made in this direction, great advantages he hoped would result from such an effort. At any rate, when published, any defects would be seen, and could be remedied in future editions.

Dr. BOOTH presumed it was understood that there was one branch which this work would not enter upon, and that was theology?

Mr. TRAICE replied that neither theology nor politics were absolutely excluded. The Yorkshire Union had requested him two years ago to look over a little catalogue which they published eight or ten years since. Finding it to be very imperfect, nothing was left for him but to take the catalogue of the London Mechanics' Institute—the original catalogue—in which standard theological works were included.

The CHAIRMAN said he took it for granted as clear, that theological or political matters would form no part of the undertaking, and that it would be understood the Society would not give its *imprimatur* to books containing these subjects. Indeed from the very constitution of the Society of Arts it was unable to pronounce any opinion on such topics. At the same time that would be a defective library which excluded the most interesting questions affecting men's welfare in this world and that which is to come. He felt, however, assured that the meaning and intent of the Society would not be misconstrued, and he, therefore, thought that without danger they might take and act upon the suggestion made.

Mr. MARTIN (Guildford) said he presumed it would still be open to local committees to select or not?

The CHAIRMAN—These catalogues would only be guides, after all.

Mr. JONES—They were not intended to be as guides to opinion.

TRUSTEES.

The CHAIRMAN—The next question for discussion was the Legal Position of Institutes—first, as regarded trustees; next, their borrowing powers; and lastly, their rating.

The Rev. Mr. BEST said, that in consequence of an application of his, this matter had been put upon the paper of business. He thought the subject was one of great importance. He had known several instances of Institutes failing, and of the property being dispersed, in his part of the country, whereas, this might be avoided by putting it in the hands of trustees, for the express use of the Institute as long as it existed. If the Institution were dissolved, it would then remain under their hands for public purposes. Therefore, these powers would be given with a view to perpetuate the benefits of the Institution; and when the Institution was once established, the property could not be dispersed. The resolution he had to propose was:—

"That it be recommended to the Institutes to vest their property and library in trustees for the use of the Institute; and, in the event of its dissolution, in trust for such public purposes as at the time of the establishment of the Institute shall be resolved on."

He had mentioned the importance of this subject, and the necessity of some short form being drawn up by the legal authorities in London, for the protection of the property of Institutes, and he was directed at the last meeting of the Committee to mention the subject. He, therefore, forwarded the suggestion to Mr. Foster for consideration that day; and he thought it sufficiently recommended itself to the members now present, and he would leave the question in their hands.

Mr. HOLE said he would readily second the resolution. He had known several cases, where property, which had been subscribed for by hundreds, was, from the failure of the Institute, divided among three or four individuals. If some short rule could be drawn up it would be very useful.

The CHAIRMAN put the resolution—which was declared to be carried unanimously; and the meeting were about to proceed to the consideration of the borrowing powers and rating, when

Mr. TRAICE said he did not subscribe to the resolution proposed by Mr. Best. He did not understand it at first, as explained by that gentleman. He did not think it was complying with the Act 16 and 17 Victoria, in empowering trustees, in anticipation of a dissolution of an Institution, to apply its property to certain purposes. He maintained that there was no necessity for the resolution.

The Rev. Mr. BEST's idea was that it would prevent the dispersion of property when once accumulated. The act did not apply to reading societies and such like institutions as they existed in small villages.

Mr. HOLE, to show the effect of the act, proceeded to read the 30th clause as follows:—

"If upon the dissolution of any Institution there shall remain, after the satisfaction of all its debts and liabilities, any property whatsoever, the same shall not be paid to or distributed among the Members of the said Institution or any of them, but shall be given to some other Institution, to be determined by the Members at the time of the dissolution, or in default thereof by the Judge of the County Court aforesaid; provided, however, that this clause shall not apply to any Institution which shall have been founded or established by the contributions of Shareholders in the nature of a joint-stock company."

The Rev. Mr. BEST would suppose the case of a valuable library being brought together, and the society was in debt, what was to prevent its being sold, if some such safeguard as that he proposed was not in existence in order to meet those debts?

Mr. HOLE must withdraw his intention of seconding the motion, because he could not support it on the ground of protecting it from creditors. He had misunderstood the purport of Mr. Best's resolution. He thought that in every case the property of a party must be looked upon as an asset to meet any legal claims against it.

Mr. TRAICE thought they ought to confine the resolution to a declaration relative to the appointment of trustees.

The Rev. Mr. BEST might observe that there was an Institution in Andover, established about 14 years since, with a library, which was vested in trustees. That society failed—there being a provision that every subscriber of 1s. per quarter was entitled to partake of the advantages of the library. He had lived to see that society restored to strength, and the library preserved; but, had the power to sell existed, it would long since have been dispersed.

Mr. NOLDWRIGHT thought the provisions of the Act most valuable, but he was sure the majority of Institutions would soon fail if it was once to be understood that their property was not liable for the payment of their debts.

Mr. TRAICE suggested that the mover should withdraw the latter clause of his resolution, and that they should request the Council of the Society of Arts to frame some simple form for vesting the personal property of Institutions in trustees.

The CHAIRMAN, if he understood the matter rightly, believed that the object was to keep intact the property of Institutions unable to go on.

The Rev. Mr. BEST said that was precisely his object.

Mr. CAMERON thought they might protect the books from sale.

Mr. EDWARDS would observe that in case of a society being dissolved, the law made the assets public property after payment of the debts.

Mr. MARTIN, thought it would be a bad example to endeavour to free property from liability to debt. He did not think such a course could be looked upon as altogether honest.

Mr. FREELAND did not believe that the law would allow them thus to protect their property against their creditors.

The Rev. Mr. JONES did not think there could be any ob-

jection to the appointment of trustees, as he thought property would be much more secure in their hands than under the control of a large Committee of Management. Such an arrangement would be better for many purposes; and, therefore, he would support any recommendation for the appointment of trustees, though he could not approve of that portion for protecting the property of a society against the creditors.

The Rev. Mr. BEST disavowed any wish to act dishonestly in bringing forward his motion. Indeed, he thought it was rather dishonest to dispose of property in which they had only a transitory interest, for the payment of debts—the more especially, as probably many of the books in the libraries would be presentations for a particular object. They had been collecting treasures for years in the British Museum. Did they think it would be honest to dispose off these treasures to pay the National debt?

Mr. HOLE—Certainly not. But they would be justified in doing so, to pay debts incurred on behalf of the Museum.

Mr. USHER suggested that they should follow the example of the Bedford Society—and always keep a good balance in hand.

The resolution, not being seconded, fell to the ground.

Mr. TRAICE said the Act of Parliament provided for a form of trust deed, as regarded the real property, such as the building belonging to a Society—and he thought that the Council might be requested to draw up a form with regard to what might be called the personal property of a Society.

The Rev. Mr. BEST observed that the majority of the speakers had alluded to regularly constituted Mechanics' Institutions, whereas, he had been alluding to village libraries (the majority of the books in which were gifts) to which the Act of Parliament did not apply.

The CHAIRMAN said, that the Council would no doubt take the subject into consideration. The next subject before them was Borrowing Powers, which, he thought, they might pass over—and he believed Mr. Hole now wished to bring before them the subject of rating these Institutions.

RATING OF INSTITUTES.

Mr. HOLE certainly felt somewhat disappointed to find that the subject of rating had been apparently shelved by the Council of the Society of Arts. The reason why he did not bring forward a motion on the subject last year was, that he was told it might interfere with the success of the Bill then about to pass into law, and he and his friends, therefore, remained silent. There was no reason, however, why they should do so now. If he was told there were objections to any class of exemptions from rates, he might readily admit that it was so, but whilst exemptions were allowed, there were no Institutions better entitled to them than Literary Societies. They exempted charitable societies, religious congregations and schools, from the payment of rates, why, therefore, should they not exempt Literary Societies? If they released a charitable society, established to assist a man in want, from rating, why should they not exempt a society started for the purpose of teaching him to rely upon himself and do without relief. He thought there was no better way of affording assistance to these Societies than by relieving them from rates. The amount might be small, but it was frequently a great deal to Institutions which had to struggle hard to maintain an existence. The three literary institutions in Leeds would have to pay about £100 a year in rates if they were enforced, and it was too much to leave them at the mercy of a rate collector or any one ratepayer, who, perhaps, might be disappointed in some measure with regard to the Institution. He had heard the noble chairman say that the Right Hon. M. Talbot Baines, M.P., President of the Poor Law Board, was about to bring in a Bill, in which the whole question of rating was to be raised. That Bill, at all events, could not be brought in before next session and if they were to leave

the subject untouched until the whole question of rating came under consideration, they were likely to be cheated out of their exemption privilege altogether. He did not think there ought to be any difficulty in the matter, for it now only existed on a mere lawyer's quibble. The Act of Parliament said that all Institutions should be exempted from rating which were exclusively used for the purposes of literature, science, and art. Now, newspapers had been decided not to come under the head of literature. He looked upon that as a mere quibble, and that newspapers were a most important portion of literature, and were destined ere long to become more important than ever. If the word "mainly" were inserted for "exclusively," every difficulty would be got over, and all they required be obtained. He believed that if the Council exerted themselves, and the various Societies saw the members of their different towns and boroughs, that they would have so much strength that there would be no difficulty in passing the Bill next session. He begged to move

"That this Conference earnestly requests the Council of the Society of Arts to take steps that the exemption from local rating, intended to be given to Mechanics' Institutions by the 6th and 7th Vict. cap. 36, and also the removal of the assessed taxes, be secured to them, either by an amendment of the present law, or the introduction of a new measure."

Mr. VALLENTINE (London Mechanics' Institution) seconded the motion. He had the honour to represent an Institution which was not in so happy a position as that at Bedford, but, on the contrary, was encumbered with a large debt. The amount of taxes materially affected them, as they represented an amount which they were annually losing. If they were relieved from the weight of the rates, they might be enabled to struggle on; but if not, he feared they must close their doors. The loss of one Institution amongst so many might not be much, but he was sure that there was no one who would not regret that the first-established Institution of the kind in London should fail. These Institutions were established to make men both morally and mentally better, and what Institution, therefore, could have a better claim to this exemption. He believed it was the intention of the Act of Parliament to give it them, but it was loosely worded, and therefore tax-collectors and lawyers had put a variety of interpretations upon it, and deprived them of their rights.

Dr. BOOTH agreed with both the last speakers as to the justice of their observations, but he was afraid that the Council had not the power to do anything, even were it expedient to raise the question. He agreed that they had the right to the exemption, but he was not quite sure that the Society of Arts could well go to the House of Commons on the subject. He believed that it was the opinion of their noble Chairman, and other well-informed persons on the subject, that if they went to the House of Commons, a committee might be appointed, and there was a great probability of all exemptions being swept away. It was for them to consider whether it would be desirable to run that risk.

Mr. COLEMAN thought that they ought to go to Parliament at all events to clear up the difficulty in which they were in. He believed it was the intention of the legislature that they should have the exemption, and they ought not therefore to be deprived of it, as it made only an infinitesimally small addition to the rates of other property.

Dr. BOOTH wished it to be clearly understood that if they did go to Parliament the result might be that they might lose the exemption altogether. Would they like to take that chance, it being well understood that the Council were not to be responsible for the result.

Mr. HOLE could scarcely believe that Dr. Booth was sincere in his expressions of a desire to get rid of the rating. He believed if the Society of Arts exerted itself zealously and energetically there would be no difficulty in settling the question. They did not want a Committee of the House of Commons. All they had got to do was to direct Mr. Lumley to prepare a declaratory act, and then for the various societies to call on their representa-

tives in Parliament to support it, and he felt assured that the Legislature would not undo their Act of 1843 for the promotion and benefit of these Institutions.

Mr. NOLDWRIGHT thought that if the Council of the Society took up the matter energetically, and the various Institutions called on the Members for their respective districts to support it, there would be no difficulty in passing a bill confirming their exemption. As a beginning he would call upon the Noble Lord in the Chair to redeem a pledge which he had given to him last year. Whilst speaking to his Lordship upon the subject, the Noble Lord probably might recollect that he said, "leave the matter alone at present, and I will undertake to bring it before the Legislature myself." He now called upon his Lordship to redeem that pledge.

The CHAIRMAN begged to say a word or two upon this subject. He was not in Parliament at the time referred to by the gentleman who had just sat down, and had no immediate prospect then of obtaining a seat, so he felt sure the last speaker must have misunderstood what he said last year; but he was acquainted with the subject of rating. He thought if they had pressed the matter last year, they would have impeded the passing of the act. He thought it would have been difficult to have got a bill passed this year, because the whole question of rating, and of exemption from rating, was expected to be dealt with on some more uniform and systematic plan than at present. It was, however, new to him to learn that the general wish of the Institutions in Union was rather to lose the privilege which many of them enjoyed, than to have the matter kept in doubt any longer. His impression was, that the question of exemption from rating was a difficult one, and he believed that any movement in the matter at the present time would lead to the sweeping away of a great proportion of the exemptions at present enjoyed by various Institutions, and foremost amongst them would be the Mechanics' Institutes themselves. With regard to pledges, he begged to say that he never gave them; that he had, ever since his first start in public life, always entered parliament as an independent member, and he told the electors of Marylebone that he would enter it on no other conditions, and he knew there were other members of the legislature who felt the same as he did on that point. He had all along shown that he had wished well, not only to Mechanics' Institutes in towns, but to equivalents for them in the remotest country village; but it was perfectly clear that nothing could be done in the matter of rating this year. He very much doubted whether parliament would entertain the question as an isolated question if it were brought forward, and whether the bill would not be rejected merely upon the ground that it was not proper to deal with isolated cases; and at the same time he felt an increasing doubt as to the justice and expediency of exemptions generally.

Mr. HOLE—Would not the Chancellor of the Exchequer receive a deputation?

The CHAIRMAN said, it was a matter of local taxation. He would remind them that the relieving of any one kind of property from taxation was merely imposing an additional burden upon the rest, and the question was how to draw the line. The judges had held that the Cambridge Philosophical Society was liable to be rated because they had a news room attached to their Institution, and there were very few Institutions which were not liable if the matter were taken up against them. Then again, there was the Athenæum Club, which possessed one of the finest libraries in London, and consisted of members more or less engaged in literature, science, and art, that was now liable also to be rated. If the word "mainly" were put in, the Athenæum Club would fairly come under the meaning of the Act, and claim exemption. Was it right that where an Institution had replaced some property which was liable to rating, such an exemption should be given? It was a more difficult matter to deal with than some present appeared to imagine.

Dr. BOOTH inferred, from the tone of the meeting, that the resolution of Mr. Hole would be carried, but he would call attention to this point, that if the Council were to take up this subject, they must ask for the co-operation of one or two representatives at this conference, to act with the committee which the Council might hereafter appoint, because he felt sure that the Council would hesitate to take the responsibility of the movement entirely upon themselves.

Mr. BLEWS supported the resolution.

Mr. TRAICE subscribed to the opinion that it was better to be without the exemption than remain in the present state of uncertainty. At the same time he thought it would be sufficient if the Society took the opinion of this conference, that it was desirable that at an early period some measure should be brought before the attention of Parliament. Much of the unpleasantness that had arisen on this matter, had been owing to the Institutions being at the mercy of parish officials, dressed in a little brief authority, but he believed if the matter were put to the vote of the rate-payers, in almost every case the Institutions would be exempted from rating. He thought it would be sufficient to record the opinion of this conference, that they were desirous the question should be settled in as short a time as possible.

Dr. BOOTH remarked, that after the expression of feeling on the part of the Conference, the Council could hardly refuse their consideration to the subject; but he repeated, that they would decline the entire responsibility of the movement recommended for getting rid of the existing anomaly.

The Rev. Mr. JONES (Romford) expressed a strong wish that something should be done to settle the question of rating.

The CHAIRMAN then put the resolution, which was carried unanimously.

It was moved by Mr. MARTIN, seconded by Mr. EDWARDS, and resolved:—

"That the following gentlemen be added to a Committee, to be elected by the Council, for the purpose of considering the best means of carrying out the foregoing resolution:—Mr. Vallentine, Mr. Traice, Mr. Hole, Mr. Noldwritt, and Dr. Prior Purvis."

The CHAIRMAN said they had now reached the last of the subjects for discussion, viz. Public recreation grounds. He would read to them the resolution that was passed at the last conference, which was as follows:—

"That, in the opinion of this Conference, with a view to the bodily, mental, and moral improvement of the community, no less than to its enjoyment, it is essential that due provision be made of adequate spaces for healthful and innocent recreation in the neighbourhood of our towns and villages; and that the members of the several Institutions be requested to exert themselves in their several localities, to promote the establishment of healthful and innocent recreation for the inhabitants."

It was moved by Mr. Coleman, seconded by Mr. Freeland, that the Conference desires to repeat the expression of its opinion of last year, which was carried.

The CHAIRMAN having declared the proceedings at an end,

Mr. TRAICE said, as he had taxed his Lordship's attention as much as any one present, he had perhaps the greatest right to thank his Lordship for the kindness, courtesy, and ability with which he had conducted the proceedings of the day.

This was seconded by Mr. Freeland, and carried by acclamation.

The Noble CHAIRMAN returned thanks for the high compliment which had been paid him, and the proceedings terminated after a sitting of nearly five hours.

ONE HUNDRED AND FIRST ANNI- VERSARY DINNER.

The One Hundred and First Anniversary Dinner of the Society took place on Tuesday, the 3rd of July, at the Crystal Palace, Sydenham. About 350 gentlemen were present on the occasion. The chair was occupied by His Grace the Duke of Argyll, F.R.S., who was supported on his right and left by Earl Granville, Lieut.-General Sir Charles Pasley, K.C.B., Col. Sykes, F.R.S., Messrs. W. Brown, M.P., A. Hastie, M.P., J. Johnstone, M.P., J. Kershaw, M.P., Elliott Lockhart, M.P., J. Malcolmson, M.P., G. Moffatt, M.P., B. Oliveira, M.P., J. Pilkington, M.P., Dr. Chambers, Dr. Cumming, Dr. Lee, L.L.D., F.R.S., Dr. Nairne, Dr. Waddilove, Dr. Watson, Captain T. B. Collinson, R.E., Captain Leopold Paget, R.A., &c., &c.

As Vice-chairmen, at the ends of the cross table, were Professor Owen, F.R.S., representing Science, and Mr. J. M. Rendel, F.R.S., representing Mechanics and Engineering. Professor Owen was supported by, among others, Messrs. J. G. Appold, F.R.S., J. W. Gilbert, F.R.S., J. Glaisher, F.R.S., C. Wren Hoskyns, W. H. Pepys, F.R.S., Dr. Roget, F.R.S., and Mr. T. Webster, F.R.S. Mr. Rendel was supported by, among others, Messrs. J. Whitworth, J. Glynn, F.R.S., C. Atherton, J. Braithwaite, J. V. Gooch, I. H. Trevithick, A. Henderson, H. Hensman, B. Fothergill, J. Samuel, W. Bridges Adams, R. Davison, D. K. Clark, A. C. Hobbs, J. Freeman, and D. Shears.

At four parallel tables, leading from the cross table, were seated the Members of the Society, the Representatives of the Institutions in Union, and their friends. The Council occupied the right-hand table, and were presided over by their Chairman, Viscount Ebrington, M.P. At this table were the Rev. Dr. Booth, F.R.S., Col. Eardley-Wilmot, R.A., Messrs. P. Graham, W. F. Harrison, J. C. Macdonald, Matthew Marshall, W. W. Saunders, F.R.S., G. F. Wilson, F.R.S., of the Council, and among others, Lieut.-Col. Andrews, Rev. Muirhead Mitchell, Rev. J. P. Norris, Messrs. J. Anderton, H. G. Bohn, Hyde Clarke, Leone Levi.

At the Arts table, which was the next to that occupied by the Council, were, among others, Messrs. Owen Jones, A. Claudet, W. E. Kilburn, Waterhouse Hawkins, H. Bradbury, E. Clowes, J. Coe, with Mr. W. Tite, M.P., F.R.S., as Vice-Chairman.

At the Manufactures table, which was next in succession, were, among others, Messrs. J. M. Blashfield, J. Bull, J. Corbett, R. T. Fauntleroy, A. Lapworth, J. R. Lavanchy, W. B. Simpson, J. Jobson Smith, J. Vavasseur, V. Wanostrocht, G. F. White, with Mr. F. Crossley, M.P., as Vice-Chairman.

At the Commerce table, which was that on

the extreme left, were, among others, Messrs. R. W. Crawford, F. Bennoch, J. Dillon, W. Hawes, J. D. Allcroft, J. E. Carlile, E. Davis, Donald Larnach, F. Lycett, J. W. Sherriff, with Mr. J. G. Frith as Vice-Chairman.

The Representatives of the Institutions in Union occupied the centre of the room, and included among others, the Rev. T. Bacon, Rev. J. Glendinning, Rev. W. Yate, Messrs. T. G. Blakie, J. W. Bontoft, W. Cockerell, A. Coleman, H. Edwards, T. Farley, H. W. Freeland, T. Garfit, H. Heane, J. Hunt, U. C. King, F. J. Macaulay, H. Martin, G. Nicholson, J. S. Noldwitt, W. K. Norway, T. J. Pearsall, Wyndham S. Portal, J. O. Radford, S. Lee Rymer, W. J. Simon, M. Soulsby, J. Usher, H. Whitfeld, with the Hon. and Rev. Samuel Best, M.A., as Vice-Chairman.

* * The Secretary regrets that it is impossible to present a full and faithful report of the proceedings at the Dinner, owing to that part of the Building in which the Dinner took place being ill adapted for speaking in. Those Members who were present can bear testimony to the difficulty of hearing the different speakers.

After Dinner, the Hon. and Rev. S. BEST having said grace,

The CHAIRMAN said he rose with great pleasure to propose that which he was convinced in an assembly of Englishmen would always be the first toast, "The Health of Her Majesty the Queen." It was not only from her high position, but from the patronage her Majesty had ever afforded to arts and manufactures, that this Society had reason to acknowledge the obligations they were under to her Majesty. He therefore begged them to drink to the health of the Queen.

This toast having been duly responded to,

The CHAIRMAN again rose, and said the next toast he had to propose was one intimately connected with that which they had just drunk, it being "The Health of His Royal Highness Prince Albert." His Royal Highness had shown himself ever anxious for the advancement of science, and he might say that he believed it was through the great zeal and attention which his Royal Highness had shown in the promotion of the arts and commerce, that the Society of Arts had taken a new start, and now occupied the proud position it held in the country.

The CHAIRMAN then gave "His Royal Highness the Prince of Wales and the rest of the Royal Family," expressing a hope that they would emulate their Royal parents in the interest they took in the promotion of art and the commercial influence of the country.

These toasts, like the preceding, were duly acknowledged.

At this point of the proceedings the Secretary read the list of Premiums awarded during the past session, which will be found given at length at page 589.

The NOBLE CHAIRMAN again rose and said, I now rise, gentlemen, for the purpose of proposing that which is the toast of the evening. I mean, "Prosperity to the Society for the Encouragement of Arts, Manufactures, and Commerce." As you all know, we have now more than entered upon the second century of the existence of this society. A hundred years is, generally speaking, no very long period in the life of a nation, and there have been centuries during our own history which have left us very much in the condition in which they found us; and in the histories of all countries—even of those which are most progressive—there are centuries of which this may be truly said. But

certainly this cannot be said of the century which has now commenced in regard to the progress of England; nor can it be justly said that the great progress which we have made as a nation has been alone in any one department of excellence, or promoted by any one class of men. We have had great statesmen, great soldiers, great sailors, and great lawyers; and during the course of that century, we have added to our dominions many of the most extensive possessions which now belong to the Crown of England. Why, a century ago, at the period when this Society was founded, we had not acquired that noble colony in the West, which now owns its allegiance to the Crown of Victoria; and I would remind you that a century ago, the young civil servant of a great commercial company was then but engaged in laying the foundation of that marvellous empire which now belongs to us in the East. Notwithstanding, gentlemen, all these great works, and all these great possessions, if I were asked to mention a circumstance which would impress upon our minds more than any other the amazing progress which has taken place in this country during the last century, I would remind you that a hundred years ago Watt and Arkwright had not begun their labours—those works which have changed the whole face of society—those labours which, I rejoice to think, are being now largely prosecuted by the Nasmyths, the Whitworths, and the Paxtons of the present day; and, gentlemen, I would say there are some who have been afraid that the progress of this country in arts and manufactures, tending to concentrate the attention of the people, as it undoubtedly does, upon the possession and the getting of wealth, would tend to dull our spirit as a nation, and make us more reluctant to perform our duties in the world. I think, however, that the experience of the last eighteen months must have silenced all such doubts. Never has there been a more truly national spirit exhibited—never has there been shown a greater willingness to submit to great burdens for the sake of great national duties, and I would say further, nowhere has that spirit been more nationally evinced, than in the great seats of our commerce and manufactures. And, gentlemen, I cannot allude to this subject without expressing the earnest hope, which I am sure is felt by every gentleman present at this table, that the events which have brought us into close alliance with our great neighbour, which is of great importance, not for war only, but for the purposes of peace, and that when this contest shall have ended, I was going to say, when it shall have been forgotten, but forgotten it never can be; but when this contest shall have passed away, those two nations will continue to emulate each other in all the arts of industry and of peace. I am sure of this, that the close connection which ought to be kept up between these two great countries, will be of immense benefit to the arts and manufactures of both. The armies have acknowledged that there are peculiar parts belonging to each, which they have felt in the hour of battle, and in the arts and sciences we must confess the peculiar excellence of each, from which we may derive mutual advantage. Undoubtedly, gentlemen, that particular in which I believe we excel almost every other nation, is that which is peculiarly connected with the operations of this Society, I mean the command over the natural powers and over the mechanical inventions which have been given to England by the progress of her arts and manufactures. Now, gentlemen, I know that this Society directs itself mainly, not to the abstract sciences, but to the sciences as they are applied to the practical arts; but I hope, gentlemen, you will allow me, who have the honour of being President elect of the British Association for the Advancement of Science in the ensuing year, to say one word in this meeting with regard to the encouragement of science simply as such. In one of the ablest lectures on the Results of the Great Exhibition of 1851, which were given in the hall of our Society at the instance of our Royal President,—I mean the lecture given by Professor Whewell, he observed, with great ingenuity and truth

that the arts have generally preceded the sciences, that just as men have constructed language, before grammars have been written, so there have been artificers in wood, in metal, and in stone, before the chemical qualities of these various substances had been found out, and science constructed upon the arts. This is undoubtedly true, but we must all recollect of late years, such has been the rapid advance of abstract sciences, that science has gone ahead of the practical arts. There is not a single month, there is not a single day, in which the abstract discoveries of the chemist, of the mechanic, and of the mathematician, are not called into practical operation for the purposes of the arts and the commerce of the country. Professor Whewell admits this in regard to chemistry and several of the other sciences, but the more you look into this matter, the more you will find that the practical arts and commerce of the country are drawing upon the resources of abstract science. All I can say with regard to this subject is, that I think we, as a commercial country, ought to appreciate abstract science and encourage the inventions of those connected with it. Upon this occasion, beneath the roof of the Crystal Palace, I feel that I have a perfect right to divest myself of all official character, and to consider myself as unconnected with the Government of the country, and in this character I am certainly prepared to say, that I do not think that the Government of this country, meaning thereby not any particular ministry, but the governments generally of this country, have not been sufficiently liberal towards matters of science. But then I would remind you that the Government of this country is but a reflex of public opinion, and if you put forth the opinion, which I believe is a sound one—if you, the great mechanical classes, demand the sciences to be more liberally promoted by the government, depend upon it your wishes will ultimately be attended to by the government. I am extremely anxious to say a few words more upon a subject which I think is interesting above all others. I do sincerely rejoice to see that the attention of this Society is not confined exclusively to the accumulation of material wealth, but that of late the labours of the Society, and the exertions of the members, have been directed almost as much to the intellectual culture of those great classes which our manufacturing industry has raised up amongst us. I thought at the time, and I think still, that one of the most valuable results of the Great Exhibition—at least one of those immediate advantages on which I place the highest value, was the habit which for some period it taught the artisans and mechanics of saving their own resources, for the purpose of being able to come up to see the Exhibition of the Industry of all Nations. There is an effect being produced by the natural laws operating in society, which we ought not to lose sight of, and which ought to be brought to the attention of the artisans and mechanics of the country. I allude to the effect produced by the great law of the division of labour. Every advance in the arts of the country is accompanied by some sub-division—some further illustration of the principle of the division of labour. Let us look at the effect which this law produces upon the happiness of the mechanic. In the early stages of the arts and sciences, a skillful artisan was a person of great individual importance in the country; at the present time, owing to the division of labour, there is hardly a single product of which any man can say with truth, "I made this." He may have made some small part of it—his labour may have been bestowed upon some minute portion, but the mind which planned the whole, and the labour which put it together, were not his, but the labour of various others. At first sight this might seem to be an evil. I believe, like all the other great natural laws operating in society, it has a beneficent purpose, and, if we use it aright, will have a beneficent result. The consequence of division of labour is this—it gives more time to the mechanic, and a higher remuneration for his labour; for, after all, it is the welfare and cultivation of the mind which alone gives dignity

to the labour of the hand. I believe, therefore, that the great principle of the division of labour is tending to give more remuneration to the mechanic, and to enable him to reserve more time for the intellectual culture of himself and his brethren. I rejoice, therefore, that this Society is directing its attention to the industrial education of the great artisan and mechanic classes. I believe you will find them at all ages—young and old—anxious to take advantage of the exertions made on their behalf, and of the opportunities afforded by societies like this for the improvement of their minds. I trust, therefore, although undoubtedly there are many difficulties in the way of a complete system of industrial education for the whole of this country, that the Council of this Society will continue to direct its attention to this important subject; that they will continue to encourage commerce between various nations, and the intercommunication of different ideas which is sure to react upon our own commerce and manufactures; and, above all, that they will attend to that moral and intellectual culture of the manufacturing classes, without which all our wealth and industry will carry with them the seeds of their own decay. The Noble Chairman then gave the toast, "Prosperity to the Society for the Encouragement of Arts, Manufactures, and Commerce," coupling with it the names of Mr. W. Tite, M.P. for Arts, Mr. F. Crossley, M.P. for Manufactures, and Mr. J. Griffith Frith for Commerce.

The toast was drunk with three times three.

Mr. TITE, M.P., rose to return thanks for the last toast, as the representative of Art. In doing so, he felt that he had more than an ordinary difficult task to perform, inasmuch as he had not heard one word of the able, and, from the way in which it had been received, he doubted not, eloquent address of the chairman. As an artist, he felt grateful to this Society for what it had done in promoting and extending a knowledge of Art, and the great improvements which had taken place, not only in that department of art to which, as an architect, he belonged, but in every other department of science amongst the people. He considered that nothing could be more beneficial, or tend more to the prosperity of the country, than a Society which had for its object the making known every improvement in manufactures and commerce, and thereby enabling those engaged in their prosecution to adapt those improvements to their various manufactures, and uphold the credit and honour of the country.

Mr. CROSSLEY, M.P., returned thanks, as the representative of Manufactures. As a manufacturer himself, he could bear testimony to the great good which had been effected through the Exhibition of 1851, established at the suggestion of the illustrious President of the Society of Arts. That Society might truly be said to be the parent of that Exhibition, and it was most gratifying to perceive the beneficial results which had flowed from it. He might mention that, prior to 1851, his house had been unsuccessfully competing with America in carpets, but through the Exhibition they discovered that the excellence of American carpets arose from their being manufactured by machinery, and his firm having spent a very large sum in procuring machinery, they were now enabled to manufacture for 2½d. a yard that which formerly cost them in labour 14d., whilst their workmen earned better wages, worked fewer hours, and a corresponding reduction in price was made to the consumer.

Mr. FRITH felt that he had, on the part of Commerce, but little to say, after the able addresses of those who had preceded him. However perfect might be the manufactures of a country, they would be of little use but for commerce in diffusing them throughout the world, and no body of men could have done more for the promotion of the great objects with which they were connected than the Society of Arts.

Mr. J. M. RENDEL, F.R.S., had great pleasure in rising to propose a toast which had been entrusted to him, more especially as he felt that he and others connected with industrial pursuits, had derived great advantages from the

exertions and researches of those connected with the abstract sciences. He was but a worker in the field, but he felt gratified at having the opportunity of attending there that evening, and of bearing his testimony to the advantages which had been derived through the exertions of the learned Societies. He believed that there was scarcely an improvement in science or art, during the last half-century, the promotion of which might not in a great measure be traced to those Societies. He had listened with great pleasure to the address of their noble chairman that evening, and he had become more than ever convinced of the advantages to be derived from a connection with those bodies. Looking with great anticipation to most important results from the further exertions of these Institutions, he begged to give them "The Learned Societies and Professor Owen."

Professor OWEN, after alluding to the difficulty of addressing audibly so large an audience in the lofty and splendid edifice in which they were assembled, said that he rose, in obedience to the arrangements of the Festival, oppressed by a sense of the inadequacy of his merits, or his power to do justice to the toast which had been so ably proposed by his esteemed friend, and by a conviction of the impossibility of duly acknowledging the flattering manner in which his name had been received and associated with the Scientific Societies of the Metropolis. The Royal Society of London was one of the oldest—after the Lyceum Academy of Rome, he believed the first association of individuals for promoting, by combined efforts, the discovery of natural truths. In the year 1645, at a time when England was falling into the distraction of religious and political struggles, a few men, under the genial inspiration of philosophy, agreed to meet together weekly to enjoy, and mutually aid in, her calm pursuit. At the Restoration, this association was recognised and chartered as the Royal Society of London for the Promotion of Natural Knowledge. Of its influence in the discovery and diffusion of that knowledge, time warns me to limit my instances to the sympathy and co-operation of the Royal Society with the transcendent labours of the immortal Newton. By the biography of that wonderful man, lately published by Sir David Brewster, many of us have perhaps learnt, for the first time, how much science is indebted to the Royal Society for eliciting, and for effecting the publication of Newton's discoveries, and for her jealous but just concern for the scientific reputation of her greatest President. The Association which I have now the honour to address was the next in order of time in this metropolis. But of the nature, scope, and beneficent influences and operations of the Society of Arts, a sketch as true as it was vivid, eloquent, and edifying has just been given by our noble and accomplished and liberal-minded Chairman. The stimulus which the writings of Buffon and Linnaeus had imparted, towards the close of the last century, to the study of living Nature, led to the Association, in 1788, of the most eminent botanists and zoologists of that period in London, for the express advancement of Natural History. To the publications and meetings of the Linnæan Society is due the rapid diffusion, in this country, of the exact methods of observing and defining the characteristics of plants and animals, which the immortal Swede had instituted. The more recondite researches into the physiology and natural system of Plants, which have given lustre to the name of Robert Brown, will always be intimately associated in the history of the Science, with the House, the Museum, and Transactions of the Linnæan Society. That Society fostered the study of the whole range of organic nature; the first Paper in its "Transactions" is on the "Extraneous Fossils of Switzerland." At the beginning of the present century, the minds interested in the history of the changes of the earth and its inhabitants were mostly ranged in two antagonistic parties, and were chiefly occupied by polemical contests for the supremacy of Neptunian or Vulcanian hypotheses. But there were a few minds

of higher order, who felt that geology must be advanced, like other natural sciences, by observation and experiment, not by disputations and speculations. This small inductive school, which included a Wollaston and a Greenough, founded, in 1807, the Geological Society of London; and truly it may be averred, that in no equal period of time has the world been enriched by a more vast and unexpected treasure of natural truths, than has accrued in regard to the ancient history of our earth and its extinct inhabitants, mainly through the efforts and by the example of the Geological Society, since the comparatively recent period of its foundation. And here I am led to refer to the praiseworthy mode which the directors of the unrivalled edifice in which we have been permitted to assemble have adopted, in order to impress upon the minds of every class some of the most striking results of Palaeontological Science, in the representations, for example, of geological strata, and by the restorations of associated extinct animals; in which appropriation of a part of the grounds of the Crystal Palace, a long cherished scheme and aspiration of mine for public instruction, have found their fulfilment, chiefly through the aid and artistic skill of the accomplished superintendent of that department, Mr. Waterhouse Hawkins. Time will not allow me to dwell on the great gain to the sacred cause of science by this principle of the division of labour, as it has been further exemplified by the Zoological, Chemical, Physiological, Geographical, Statistical, Medico-surgical, and Microscopical Societies of this metropolis. But I cannot omit referring to an English characteristic, common to them all, viz.,—that they are self-supporting, that they are independent Associations of private individuals for the public weal—for the promotion of peace—for the progress of civilization throughout the world. The founders of our Royal Society began by subscribing each a shilling a week. When a young scientific recruit has now the honour of being enlisted into its ranks, and would buy up his annual subscription, he must pay down £60. About ten years ago, a liberal Administration lent a timely assistance to the aims of the Royal Society, by the munificent annual grant of £1000. This grant has been of essential service in promoting scientific investigation; by enabling the less wealthy inquirer to undertake experiments otherwise too costly; by expediting the publication of useful Constants, Star Catalogues, and the like works, which can only be published at a pecuniary loss; by enabling the naturalist and anatomist—as more than once in my own case—to procure the aid of good artists in the delineation of anatomical structures, rare fossils, and other new or nondescript natural objects. I trust that England may never be so low reduced in her righteous struggles as to make it necessary to withdraw this grant. And now, finally, in reference to the topic touched upon by the noble chairman, viz., the social position, national relations, recognition and rewards of scientific merit in this country. What these were of old—how they were once viewed—we see in the provisions made in mediæval times for the due dignity and independence of such master-minds as might achieve the higher posts at our Universities, such positions, for example, as the Deanery of Christchurch, Oxford, the Mastership of Trinity College, Cambridge, which the wisdom of our ancestors established for those men who won renown in the sciences, which alone were recognised in the time of the foundation of those and the like independent and dignified offices. The human intellect has since extended its conquests over a wider range and different fields; more congenial, perhaps, to its true aims and powers than the scholastical, logical, and theological studies which represented science before Galileo and Bacon. Has England continued to cherish and foster in the same spirit the new and fruitful Natural Sciences, as she honoured herself and manifested her wisdom by doing, in relation to the older forms of human knowledge? What, for instance, at the present period of her unexampled wealth, due mainly to the application of the abstract discoveries of science—

what is the national relation of her Faraday? What is my own? Are we labouring, lecturing, in national institutions, in fixed positions, absolutely exempt from the annoyance of individual interference or caprice, in the peace-giving certitude of the continuance of hardly-earned emoluments, with the cheering conviction of a suitable retiring provision when the wearied brain begins to fail in its wonted and expected efforts? As working men in our line, with bread to earn by the work we do, England owns us not; she ignores us in the sense in which she recognised and provided for her mediæval teachers. We are mere servants of particular chartered bodies. As a comparative anatomist, indeed, I deem myself fortunate among my fellow-workers in the place I hold, but it needs only that a majority of the Council of the College of Surgeons should so will and vote it, and after nigh 30 years' service I must begin the world afresh. My masters are irresponsible, or only remotely responsible, to public opinion. Hitherto England has devised no other or better position for the man whom she may delight to honour by calling "her Cuvier," than the curatorship of a museum belonging to one section of the medical profession. In my own case, indeed, the Council of the Surgeon's College have done me the honour to re-elect me annually, for some years past, to a professorship not previously held by the curator of their museum. But this position has none of that fixedness and independence which my brother professors of the same science on the Continent enjoy. When the First Consul of France revised the appointments and position of the professors in the national establishment of the Garden of Plants at Paris, the salary which he attached to the chair of comparative anatomy, with which the secretaryship of the sciences was then associated, the appointment, I say, was on such a scale, that the finance minister remonstrated. "Cuvier," replied Napoleon, "has a position in science; it is for the honour of France that he should be able to maintain that position towards the foreign savans who may visit Paris." Great is the pleasure with which I can state, that the short-comings of our national arrangements for analogous cases have been well understood by the most illustrious personages and individuals of the State, who have generously endeavoured to remedy and compensate for them. The noble lord at the head of foreign affairs, in the most handsome terms, gave my son a clerkship in his office. Sir Robert Peel in assigning to me, a short time before his lamented death, a pension of £200 a year, well appreciated the acceptability of such a provision in the exemption from anxiety flowing therefrom. I shall never cease to gratefully cherish the memory of the wise and benevolent statesman, who created for me the satisfaction of feeling that, whatever might possibly cause a termination of my present appointments, I do not thereby fall into utter destitution. Her most gracious Majesty, measuring my humble merits by the standard of her own greatness of mind, was pleased to offer me, as a residence, the mansion of the late King of Hanover, at Kew. On my respectfully representing to her illustrious consort, your gifted and philosophical president, the disproportion of my means to the fruition of that royal gift, he was pleased to suggest the assignment to my use of a beautiful cottage, in which the most healthful and delightful hours of my life have been spent, and which daily renews a grateful sense of the happiness and privilege we enjoy in the benign reign of Victoria.

The Rev. Dr. Booth, F.R.S., had been requested to propose "Prosperity to the 368 Mechanics' and Literary Institutions in Union with the Society of Arts." Four years ago they had had their first meeting, under the presidency of Mr. Harry Chester, whose absence that day, in consequence of domestic affliction, he deeply deplored. He must say that he had been greatly gratified by observing how much those societies were doing in advancing the morality and social position of the industrious classes. Of the value of these Institutions as great moral instructors, he believed too much could not be said; but he

would not occupy their time longer than to propose "Prosperity to the 368 Institutions in connection with the Society of Arts," coupling with it the name of the Hon. and Rev. Samuel Best.

The Hon. and Rev. S. BEST responded to the toast, which he presumed he had been called upon to do from the circumstance of his having taken a deep interest in the success of various Literary and Mechanics' Institutions. He adverted to the great benefits which had resulted from the union of these Societies with the Society of Arts, to the spread of useful education and knowledge, and to the great moral influence which Mechanics' Institutions and Literary Associations exercised, not only on the present generation, but would equally bear on generations to come. In conclusion, he begged to return thanks for the Societies with which he was personally connected, and also on behalf of the other Institutions in union with the Society of Arts.

Earl GRANVILLE said that he had been requested by the Council of the Society of Arts to propose a toast, and he did so with great pleasure, though he felt some difficulty upon the subject, lest the arrangements of the Adelphi might come under the censure of Drury-lane, for having placed so much in the hands of members of the Upper House. He had been detained in that house, and had therefore arrived late, but he must say that he was gratified on his arrival to find that that evening they had got a grand show of the right men in the right places. In saying this he had to acknowledge the advantage of being connected with the Society of Arts, for his noble friend was perfectly aware that it was much more difficult to put the right men in the right places than the wrong men in the wrong places. He regretted that he had not been in time to hear what had taken place that evening, as he might be led to repeat something that had been already said. In endeavouring to persuade his noble friend the chairman to preside at that dinner, he had explained to him that, unlike other dinners, it would be quickly served, and the speeches would be few and short. As regarded the first part of what he had stated being true, he had had a sufficient proof, for the dinner was over before he arrived, and the second part he should endeavour to prove by the brevity of his own address. If the Society of Arts proposed to itself less ambitious objects than other learned or scientific societies, he was quite sure there was none which had done more for the advantage of the artizan, and for promoting the progress of the commerce of the country. They were apt, at the present moment, to think more of war than of peace, and it appeared to him that their Society was something like those excellent troops the Zouaves. They were apt to go into action without reference to how they were to get out again; but, in fact, they could turn their hands to everything—they were full of resources. He had read that when the Zouaves found themselves between a cross fire, they laid themselves down, and allowed the Russian regiments to fire into one another, and then when their enemies were pretty well destroyed, they got up again and made a step in advance. So the Society of Arts had kept clear from the disputes of all sections and denominations of religionists and educationalists. They had allowed them to dispute by themselves, and then, taking advantage of their position, had taken a step in advance, and none had been more important than that of bringing the Mechanics' Institutions into union with them. He believed that if Montesquieu were now alive, he would refer to the Society of Arts as a proof of the advantages resulting from good government and perfect organization. The Society had done much to assist the Government of the country in the work of education, and he hoped that within a few months they would have erected a building for a General Trade Museum, for exhibiting those various collections of the materials used in manufactures and arts, which the Society of Arts had been so instrumental in bringing together. He ventured to say that the Committee of Council of Education

were desirous of doing all in their power to promote the formation of such a Museum, which might naturally be said to arise out of the Great Exhibition of 1851. This Society had much to do with that Exhibition, which had, he believed, given a remarkable impetus to individual enterprise, as well as to the commerce of the world. If there was one man more than another connected with that Exhibition, whose health they were bound to drink, it was Sir Joseph Paxton. They all knew what Sir Joseph had done towards providing them with a suitable building for that Exhibition, and which had led to the formation of the splendid edifice under the roof of which they were then assembled. They had heard that Aristides was not always just, neither were the works of Sir Joseph always perfect, and he was rather happy to find one flaw in his character, but he hoped next year that he would carry his principles of administrative reform so far as to give them a room in which they could hear themselves and one another without the risk of injuring their lungs by too great exertion. The noble lord concluded by giving the health of "The Directors of the Crystal Palace Company, coupling with it that of Sir Joseph Paxton, M.P."

SIR JOSEPH PAXTON, M.P., on the part of the Crystal Palace Company and himself, begged to return them his sincere thanks for the honour just conferred upon them. Such an honour could not be otherwise than most gratifying, and in acknowledging it he hoped they would excuse him if he took that opportunity, in accordance with his usual habit, of endeavouring to do a little business. They had that night heard that there were 368 Institutions in connection with the Society of Arts. He could not but feel that those Institutions benefited greatly by that connection, neither could he forget that to that Society they were in a great measure indebted for the formation of the Crystal Palace. It was the first time in the history of the world that private enterprise had brought under one roof so much that was beautiful in art and useful in commerce as was to be found in that building which was devoted to the carrying out of those objects which it was the mission of the Society of Arts to promote. The noble lord had told them that the government was about to provide a great temporary building as a General Trade Museum. Now he, on the part of the Crystal Palace Company, begged leave to offer them all the room required for the purpose. If they would bring their collection there, where it could be seen by millions, he would undertake that they should be habited in a proper and comfortable manner, free of charge, and a large expense might be thereby saved to the country. He trusted, that when the subject came to be considered by the government, the noble lord would do him the honour to remember the offer he now made, that the Crystal Palace Company would find any amount of room required for the Exhibition. He had listened with pleasure to the eloquent address of his friend Professor Owen, and he perfectly agreed with him, that too little was done in this country for scientific men and for scientific Societies. He was told that the annual grant of £1,000 to the Royal Society was about to be withdrawn; but he hoped it was not so, and he trusted that they would have the aid of the noble chairman, and of the noble lord who had last spoken, in supporting and promoting the interests of those Societies. He believed that £60,000 or £70,000 was annually drawn by government from inventors who wished to bring their inventions before the public, and he thought that money might very properly be applied in promoting their interests through these Societies. He pleaded guilty to the charge that the room in which they were then assembled was not fitted for sound, but this was the first time it had been used for such a purpose. It had only been temporarily arranged for that day, but if the Society of Arts did them the honour of holding their meeting of next year in that building, he would venture to say, that not only would the speakers be enabled to hear themselves but be heard by every gentleman present.

Lord Viscount EBRINGTON, M.P., in proposing the health of the Chairman, said that he had had intrusted to him a toast which he was sure would be received with gratification by the company assembled. He had listened with great delight to the eloquent address of the noble duke who had that day presided over them, an address which was, indeed, characteristic of the enlightened feelings of his Grace. He had heard with satisfaction the remarks of the noble Chairman on the subjects of the Financial Reform and the Administrative Reform movements. He would merely observe that in one case, the Administrative Reform agitation had been based on the ruins of the Financial Reform. The Financial Reform Association confined itself to cutting down salaries, but the Administrative Reform Association took larger views, and recognised the wastefulness of parsimony, and the propriety of giving the public labourer his proper wages. With reference to the noble duke, it was gratifying to the Society of Arts that at this, their 101st Anniversary, they should be presided over by a nobleman who was distinguished alike for his talents and for his amiable qualities in private life. He had the honour to propose the health of their Chairman, with many thanks for his kindness in presiding over them that day.

The Noble CHAIRMAN felt much gratified by the kindness with which the toast had been received. It was true, as had been said by his noble friend, that he required some little persuasion from his persuasive lips to undertake the duties of chairman that day, and in intimating that reluctance he had, he thought, proved himself a better administrative reformer than his noble friend. He thought it required some boldness to liken this Society to the Zouaves, for his noble friend on his right (Earl Granville), came running in just as the Zouaves did at Inkermann, whilst they were proceeding under a hot sun and certainly in an apartment most unfavourable for being heard, and he thought they would all agree that, although they were the right men, they certainly were not in the right place. His noble friend next him had amused them amazingly, and when he (the Duke of Argyll) was requested to take the chair, he said he knew very little about the Society of Arts; he was a member of Societies which directed their attention to the more abstract branches of science, to which Professor Owen had alluded in a speech which he should have been glad for all present to have heard, although if what he (the Duke of Argyll) had said were fully reported in the newspapers, he was afraid he should get into a scrape with some of his colleagues. He certainly did put off his official character, but he must do his noble friend (Earl Granville) the justice to say that, he believed if he had been present he would have concurred fully in all that he had said. The principle on which he had acted in the Committee on Education had been of the most liberal character, and he trusted that, setting aside all abstract theories, which tended to divide men from men, instead of leading them to unite in common action for a common good; they would continue to advocate to the utmost of their power the industrial education of the working classes of the country. The company then separated.

GENERAL MEETING.

WEDNESDAY, JULY 4TH, 1855.

The General Meeting for the election of officers for the ensuing year was held on Wednesday, the 4th inst., W. W. Saunders, Esq., F.R.S., Deputy-Chairman of Council and Treasurer, in the chair, when the following noblemen and gentlemen were declared to be duly elected to fill the several offices. The names in *Italics* were not in last year's list :—

COUNCIL.

PRESIDENT.

H.R.H. PRINCE ALBERT, F.R.S., &c., &c.

VICE-PRESIDENTS.

Harry Chester.	The Duke of Newcastle.
Henry Cole, C.B.	<i>Sir Joseph Paxton, M.P.</i>
C. Wentworth Dilke	<i>Sir Robert Peel, Bart., M.P.</i>
<i>Viscount Ebrington, M.P.</i>	Dr. Lyon Playfair, C.B.,
William Ewart, M.P.	F.R.S.
The Earl Granville, F.R.S.	John Scott Russell, F.R.S.
Lord Robert Grosvenor,	<i>Robert Stephenson, M.P.,</i>
M.P.	F.R.S.
The Earl of Harrowby,	William Tooke, F.R.S.
F.R.S.	<i>Thomas Twining, Jun.</i>
The Dean of Hereford.	The Lord Bishop of Win-
Henry Thomas Hope.	chester.
George Moffatt, M.P.	

OTHER MEMBERS OF COUNCIL.

<i>Rev. Dr. Booth, F.R.S.,</i>	John Cameron Macdonald.
<i>Treasurer.</i>	<i>John Joseph Mechi.</i>
Thomas De La Rue.	Sir John Ramsden, Bart.,
Lieut.-Col. F. Eardley-	M.P.
Wilmot, R.A.	<i>Samuel Redgrave.</i>
<i>Joseph Glynn, F.R.S.</i>	<i>William Wilson Saunders,</i>
Peter Graham.	F.R.S.
<i>William Hawes.</i>	George Fergusson Wilson,
<i>Matthew Marshall, Treas-</i>	F.R.S.
<i>urer.</i>	Thomas Winkworth.

AUDITORS.

William Frederick Harrison | *Samuel Morton Hubert.*

SECRETARY.

Peter Le Neve Foster, M.A.

COLLECTOR AND FINANCIAL OFFICER.

Samuel Thomas Davenport.

The following Candidates were balloted for, and were declared to be duly elected Ordinary Members :—

Bacon, Rev. Thomas	Longbottom, John
Baker, William	Macnought, Archibald
Barlow, Robert Sharp	Mann, James Hargreave
Barry, John Tottenham	Martin, Rear-Admiral Wil-
Browne, Henry	liam Fanshawe
Castleman, Charles	Prevost, George
Chambers, David Noble	Rice, William
Copland, James, M.D.,	Rose, James Anderson
F.R.S.	Rymer, Samuel Lee
Davis, Alfred	Salmon, John
Dobson, Benjamin	Tamplin, Richard
Greaves, Charles	Walmsley, Geo. Augustus
Hambley, Joseph	Watkin, Edward
Holmes, Alfred William	Watkins, Zacharia
Lark, James	Whittington, Rev. Richard
Lewellin, Henry	Wicks, John

PREMIUMS AWARDED.—SESSION 1854-55*.

The Council have awarded the following Premiums for PAPERS read at the Weekly Evenings Meetings :—

To Charles Atherton, Chief Engineer of H.M. Dockyard, Woolwich, for his Paper "On the

* Reports from some of the Committees have been unavoidably delayed. Should any additional premiums be awarded by the Council, they will be announced in a future number of the Journal.

Capability for Mercantile Transport Service of Steam-ships."—The Silver Medal.

To Colonel Arthur Cotton, late Chief Engineer, Madras, for his Paper "On Public Works for India, especially with reference to Irrigation and Communications," and for his persevering and continued advocacy for their extension.—The Silver Medal.

To John Bennet Lawes, F.R.S., for his Paper "On the Sewage of London."—The Silver Medal.

To John Forbes Royle, M.D., F.R.S., for his Paper of last Session "On Indian Fibres fit for Textile Fabrics, or for Rope and Paper-making."—The Silver Medal.

To Charles Sanderson, for his Paper "On the Manufacture of Steel as carried on in this and other Countries," being an Essay sent in competition for a Premium offered in the Society's Prize List.—The Silver Medal.

To Peter Lund Simmonds, for his Paper "On some Undeveloped and Unappreciated Articles of Raw Produce from different parts of the World."—The Silver Medal.

The Council have also awarded the following Premiums for Articles exhibited in the Seventh Annual Exhibition of Inventions, or submitted for the consideration of the Society's Committees:—

To Felix Abate, of Naples, for "Nature Printing from Wooden Blocks and Rollers."—The Silver Medal.

To Field and Co., of Birmingham, "For the production of Microscopes, to be sold to the public at the respective prices of 10s. 6d. and £3 3s.," sent in competition for the Special Premium offered by the Council.—The Silver Medal.

To Andrew Peddie How, for his "Engine-Room Telegraph."—The Bronze Medal.

To Herbert Mackworth, M. Inst. C.E., Government Inspector of Mines, for his "Instrument called 'METRA,' intended for the use of Mining and other Engineers, for Geologists, Scientific Travellers, &c."—The Bronze Medal.

To Messrs. W. Muir and Co., Manchester, for their "Improved Grindstones."—The Bronze Medal.

To Francis Herbert Wenham, "For an Improved LETTER LOCK, which prevents the combinations being ascertained by any other means than by working out the entire system of changes," sent in competition for the Premium offered in the Society's Prize List.—The Bronze Medal.

P. LE NEVE FOSTER, Secretary.

MEETINGS FOR THE ENSUING WEEK.

TUES. Zoological, 9.
WED. Literary Fund, 3.
SAT. Royal Botanic, 3½.

PATENT LAW AMENDMENT ACT, 1852.

APPLICATIONS FOR PATENTS AND PROTECTION ALLOWED.

[From Gazette, June 29th, 1855.]

- Dated 13th March, 1855.*
558. A. E. L. Bellford, 32, Essex-street, Strand—Musical wind instruments. (A communication.)
Dated 20th March, 1855.
627. H. T. Williams, Guilford street—Easel.
Dated 25th April, 1855.
935. F. J. Anger, 16, Stamford-street—Metallic alloy. (A communication.)
Dated 1st May, 1855.
974. G. W. Knocker, Dover—Motive power.
Dated 9th May, 1855.
1046. S. C. Lister, Bradford—Preparation of fibres for spinning.
Dated 16th May, 1855.
1101. W. Latham, Liverpool—Fabrics for saddle covers.
Dated 26th May, 1855.
1195. W. S. Young, Leith—Prevention of smoke.
Dated 2nd June, 1855.
1265. H. Galante, Paris—Surgical injection bottle.
Dated 4th June, 1855.
1267. M. Staite, Liscaid—Black paint.
Dated 5th June, 1855.
1267. F. Puls, Soho-square—Electro-coating iron.
Dated 6th June, 1855.
1289. J. Gedge, 4, Wellington-street South—Flat tiles. (A communication.)
Dated 13th June, 1855.
1345. F. C. Bakewell, 6, Haverstock-terrace, Hampstead—Supplying furnaces with hot air. (A communication.)
1346. F. C. Bakewell, 6, Haverstock-terrace, Hampstead—Rotating breech fire-arms. (A communication.)
1347. J. Avery, 32, Essex-street, Strand—Oscillating steam engines. (A communication.)
1348. W. J. Blackman, Kensington—Cough syrup.
1349. E. R. and F. Turner, Ipswich—Grinding grain.
1350. W. Moxon and J. Clayton, Rochdale—Looms.
1351. H. H. Henson, Parliament-street—Portable buildings.
1352. J. Betteley, Liverpool—Iron knees for ship-building.
1353. J. Betteley, Liverpool—Ships' anchors.
1354. G. Cottam, Winsley-street, Oxford-street—Hayracks and harness brackets.
1355. G. A. Biddell, Ipswich—Grinding machinery.
1356. E. Lodge, Mirfield, and G. Marshall, Huddersfield—Animal and vegetable naphtha, ammonia, and charcoal.
Dated 14th June, 1855.
1357. G. Sinclair, Regent-street—Signalling between-railway guards and drivers.
1359. J. Enouy, 31, Denbigh street, Pimlico—Revolving fire-arms.
1360. A. Robertson, Islington—Packages.
1361. F. Leloup, Paris—Separating cotton from wool, silk, &c. (A communication.)
1362. S. C. Lister, Manningham—Treating silk waste.
1363. J. T. Chance, Birmingham—Glass fattening furnaces. (A communication.)
Dated 15th June, 1855.
1364. W. Hewitt, Bristol—Propelling vessels.
1365. W. Clay, Liverpool—Bar iron.
1366. W. Clay, Liverpool—Peculiar application of bar iron.
1367. H. Bridgewater, Alfred-place, Bedford-square—Spike.
1368. W. Lee, Duke-street, Westminster—Water closets.
1369. H. Mathis, Paris—Preserving wood. (A communication.)
1370. J. H. Sadler, Hunslet, Leeds—Looms.
1371. G. F. Morrell, Fleet-street—Ink bottles.
Dated 16th June, 1855.
1372. D. Pallier, Broad-street, Lambeth—Soap.
1373. W. Jones, Birkenhead—Punching machinery.
1374. J. Webster, Birmingham—Balance.
1375. L. F. Vaudelin, Upper Charlotte-street, Fitzroy-square—Railway breaks.
Dated 18th June, 1855.
1377. J. Sellars, Monsall-house, near Manchester—Starch.
1378. J. Carlhian and J. Corbiere, 27, Castle-street, Holborn—Moderator lamps.
1379. L. H. Réal, Paris—Elastic seatings for beds, &c.
1380. R. Peaker, Methley, and T. Bentley, Wakefield—Grinding machinery.
1381. W. H. Wilding, New-road—Furnaces.
1382. H. Bessemer, Queen-street-place, New Cannon-street—Screw propellers.
1383. W. Little, Strand—Printing machinery.
1384. H. Bessemer, Queen-street-place, New Cannon-street—Cast steel and mixtures of steel and cast iron.
1385. T. Blanchard, Paris—Bending timber.
1386. H. Bessemer, Queen-street-place, New Cannon-street—Ordnance.
1387. H. Francis, 456, West Strand—Cutting out garments.
1388. H. Bessemer, Queen-street-place, New Cannon-street—Rolls or cylinders.
1389. E. Myers, Rotherham—Raising liquids.
1390. H. Bessemer, Queen-street-place, New Cannon-street—Railway wheels.
1391. E. Myers and J. W. Potter, Rotherham—Buffers, and draw and bearing springs.